



88018501



# MERCED WILD AND SCENIC RIVER DRAFT MANAGEMENT PLAN

February 1990



United States Department of the Interior  
Bureau of Land Management

Folsom Resource Area  
63 Natomas Street  
Folsom, CA 95630



## TABLE OF CONTENTS

	<u>Section</u>	<u>Page#</u>
	Summary	i
I.	Introduction	1
II.	Planning Goals	4
III.	Management Objectives	4
IV.	Management Program	5
	A. Wild and Scenic River Corridor	
	Description	5
	B. River Segments	6
	C. Segment Description and Management	
	Actions	6
	1. Redbud to Briceburg	6
	2. Briceburg to Mountain King Mine	12
	3. Below Mountain King Mine to Lake	
	McClure	18
	D. Management Actions Common to all River	
	Segments	23
V.	Implementation Schedule and Costs	27
VI.	Monitoring	29
VII.	Appendices	35
	A. Summary Saxon Creek Project	36
	B. Summary Limestone Salamander ACEC	38
	C. Summary Merced River AMP	39
	D. Withdrawl Justification/Rationale	40
	E. Existing Placer Mining Operations Map	49
	F. Placer Gold Mining Guidelines	53
	G. Allowable Suction Dredge Area Map	55
	H. Summary Merced Burn Plan	59
	I. Existing Supplemental Rules, Guidelines	60

BLM LIBRARY  
 SC-324A, BLDG. 50  
 DENVER FEDERAL CENTER  
 P. O. BOX 25047  
 DENVER, CO 80225-0047

BUREAU OF LAND MANAGEMENT LIBRARY

Denver, Colorado



88018501

UNITED STATES  
DEPARTMENT OF JUSTICE  
FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535

## Summary

This plan provides management direction for the Bureau administered lands along the Merced River, in Mariposa County, California. Three miles of the river corridor have been included in the Wild and Scenic River System. An additional eight miles of river are under study for designation into the system. This plan assumes the remaining eight miles of river will be designated. Management of commercial white water activities is addressed from El Portal to Bagby because the Bureau is the lead management agency for this program by agreement with the National Park Service and the United States Forest Service.

This plan specifies management actions and facility development along the river. Overall development will be limited in extent and rustic in character. The intent is to provide minimum facilities consistent with safe and enjoyable use of the river. Campground improvements are limited to site design, sanitation facilities, safe drinking water, fire rings, and tables in the McCabe Flat, Willow Placer and Railroad Flat campgrounds. Road maintenance will improve, and a hiking, equestrian and bicycle trail is proposed along the old Yosemite Railroad grade from Bagby to El Portal. Rafting put-in and take-out areas will have improved sanitation, parking, loading and off-loading areas. Campsites for hikers, boaters and overnight users, outside of the three developed camps, are identified. Major improvements are proposed at Briceburg on Highway 140 to improve access. Parking, sanitation facilities, put-in and take-out areas will be provided. The historic building at Briceburg will be the site of a Bureau of Land Management Entrance Station for visitor assistance.





Lands in private ownership along the river will be acquired on a willing-seller basis. This will consolidate public ownership of the river.

In addition to the withdrawal of the wild portion of the Study River, the Bureau is proposing to withdraw from mineral entry the recreational segments of the river covered by this plan. The withdrawal will include all lands within the Merced River streambed(between normal high water marks), the Yosemite Railroad Grade, lands between the river and the railroad grade, and the Briceburg acquisition. This withdrawal will be referred to as the Streambed/Railroad Grade withdrawal in the text of this document. During the study, the river corridor from Briceburg to Lake McClure's 867 foot level is withdrawn from mineral entry. The plan also proposes to manage suction dredging under the Bureau's Special Recreation permitting regulations in areas free of mining claims. Areas where dredging would and would not be permitted are defined in the plan.

Fire management, wildlife protection, grazing management and other resource programs which occur within the  $\frac{1}{2}$  mile river corridor are also addressed.

Development of this plan assumes approval and construction of the Saxon Creek water project.

Implementation of the plan would occur over 5 years at a cost of \$426,500 for improvements and \$360,000 for land acquisition.

Operation and maintenance costs of facilities will be \$40,000 per year when all facilities are operational.





## MERCED WILD AND SCENIC RIVER MANAGEMENT PLAN

### I. INTRODUCTION

#### A. Location and Setting

The Merced River system is located in central California in Mariposa and Madera counties [MAP 1]. The main fork of the Merced River originates in eastern Madera County, inside Yosemite National Park, at an elevation of 13,000 feet. The Merced traverses 79 miles through a glacially-carved canyon and rugged mountain and foothill country in a series of rapids and waterfalls to the high water level of Lake McClure at an elevation of 867 feet. Below Lake McClure, the river enters the California Central Valley and joins the San Joaquin River.

#### B. Purpose and Scope of the Plan

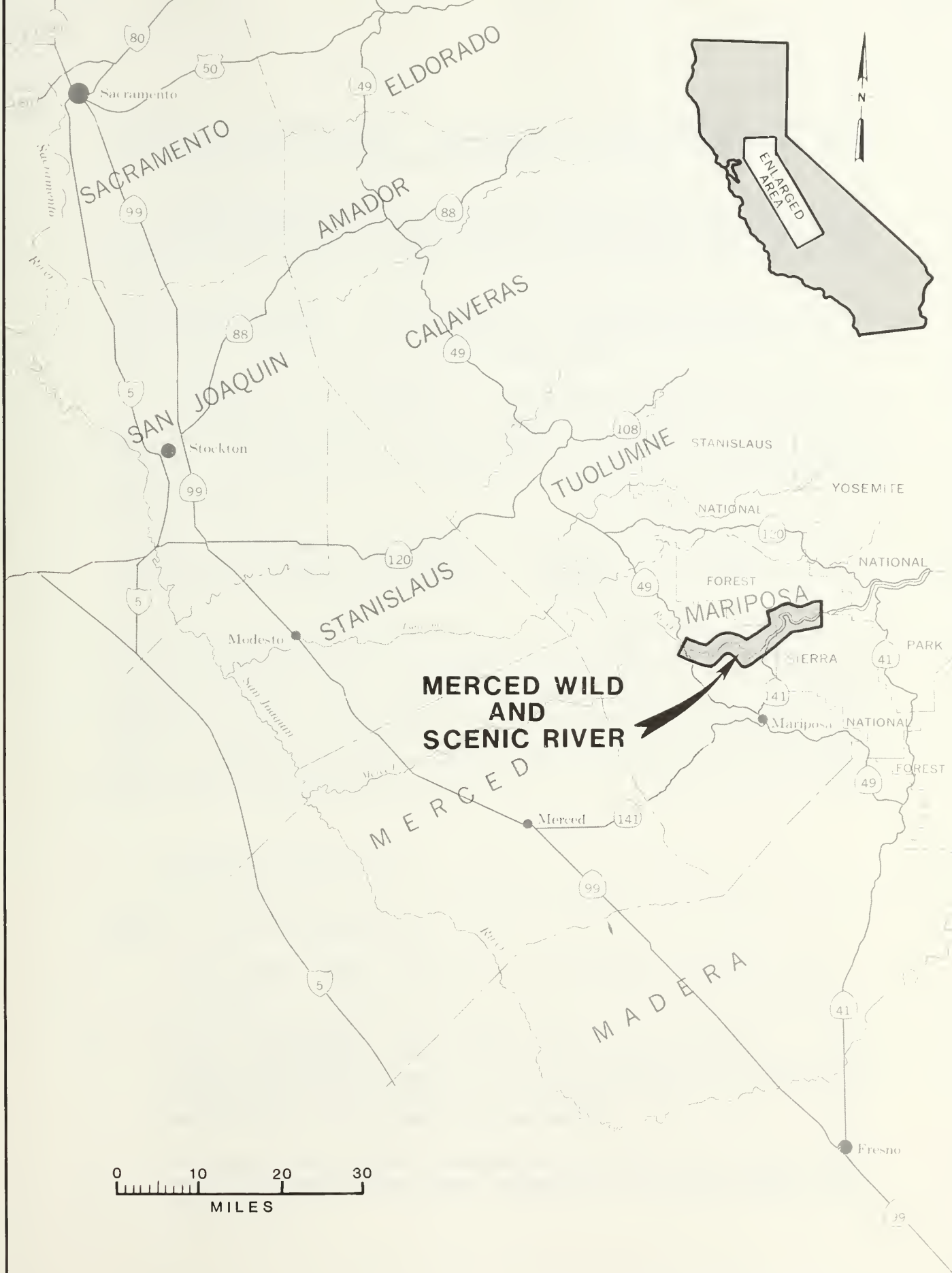
The Merced Wild and Scenic River Management Plan provides direction for managing the Federal lands within the boundaries of the Wild and Scenic River corridor. This plan was prepared by the Bureau of Land Management for those segments of the Merced Wild and Scenic River that are outside of the National Park Service and Forest Service boundaries. The plan is expected to complement plans developed by the Park Service and Forest Service.

Whitewater recreation activities and facility development on National Park Service and Forest Service lands are discussed in this plan because the Bureau of Land Management is the lead agency in managing this activity through a Letter of Agreement with the National Park Service and a Memorandum of Understanding with the Forest Service.

The scope of the plan will include management objectives and actions required to meet those objectives, including funding, and personnel. Requirements for operation and maintenance are included. Specific project plans will be covered in separate documents.

The Bureau manages three miles of the main fork of the Merced River that was included in the National Wild and Scenic River system under Public Law 100-149. Eight additional miles of the lower main stem of the Merced River have been identified for study, and possible inclusion in the Wild and Scenic River System. Once a river segment is identified for study it must have adequate interim protection until a final decision is





**MERCED WILD  
AND  
SCENIC RIVER**

MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
**LOCATION MAP**



reached concerning its eligibility for inclusion in the Wild and Scenic River System. Protection of the study river must be provided in the following ways:

1. Free-flowing Values. The free-flowing characteristics of the river cannot be modified to allow stream impoundments, diversions, channelization, and/or rip-rapping except to the extent authorized under law.
2. River Values. Outstandingly remarkable values of the river must be protected (subject to valid existing rights) and to the extent practicable, enhanced.
3. Classification Impacts. Management and development of the river and its corridor cannot be modified, subject to valid existing rights, to the degree that its eligibility or classification would be affected (i.e., its classification cannot be changed from wild to scenic, or scenic to recreational).

Interim management of these values will be based on the management standards specified in Section III- Management, 47 C.F.R. 39454 (Sept. 2, 1982).

The Bureau cooperated with the Sierra National Forest to complete the boundary description and river classification on the designated portions of the Merced River. The combined Forest Service and Bureau of Land Management boundary description and classification environmental assessment for the South Fork Merced and Merced Rivers was released in July, 1989 for public comment. The Bureau's Record of Decision, accepting the preferred alternative, was signed by the State Director in September, 1989.

### C. Planning Assumptions

The Merced Wild and Scenic River Management Plan was written based on five assumptions:

1. The lower eight miles of the Merced River will be included in the National Wild and Scenic River System.
2. The river segment beginning 300 feet upstream of Bear Creek confluence down to the Mountain King Mine will be classified as Recreational, and the remaining three mile stretch of river down to the 867 foot level of Lake McClure will be classified as Wild.
3. Wild and Scenic River boundaries will be one-quarter mile on each side of the river; measured from the normal high water level.





4. Saxon Creek will be a suitable site to place facilities needed to meet the water needs of Mariposa County (See Appendix A).
5. Protective measures in place during the study phase will remain in place after designation.

Based on current and projected resource, social, political and economic conditions, the Bureau of Land Management considers these five assumptions reasonable and necessary in managing and protecting the Merced River for the benefit and enjoyment of present and future generations.

#### **D. Relationship with Other Planning**

The Merced Wild and Scenic River Management Plan is consistent with the Sierra Planning Area Management Framework Plan. That plan provides the general land management framework for BLM in the region and designates the river corridor an Area of Critical Environmental Concern (ACEC). This plan will provide management decisions relating to several resources and land uses along the Merced Wild and Scenic River. Issues such as, recreation management, range and watershed management, wildlife management, minerals management and cultural resource management, are considered in this plan to the extent they relate to the use and protection of the river corridor.

### **II. PLANNING GOALS**

The planning goals for the Merced Wild and Scenic River Management Plan are as follows:

1. Establish river management objectives.
2. Provide direction to meet the objectives.
3. Identify management issues and prescribe actions to manage development and use.
4. Determine the resource opportunities to be provided.
5. Describe corridor boundaries and classifications.
6. Monitor and evaluate resources and their use.

### **III. MANAGEMENT OBJECTIVES**

#### **A. Overall Management Objectives**

The Merced River will be managed to preserve and protect the values which led to its designation as a Wild and Scenic River. The free flowing characteristics of the river will be preserved, and the remarkable values will be protected and enhanced. Recreational opportunities will be provided as appropriate.





Land use conflicts will be examined and resolved in favor of the preservation and enhancement of natural resources. Unauthorized or destructive land uses will be resolved through administrative and criminal remedies. Facility development will be limited and consistent with the undeveloped character of the river. Road maintenance, rustic campground development (water, sanitation, picnic tables, fire rings) necessary for safe use and enjoyment of the river will be provided.

Recreational and other uses will be managed to minimize use conflicts and to maintain a high degree of user satisfaction.

#### **B. Specific Area Objectives**

- a. Preserve and enhance the quality of the viewshed and watershed.
- b. Preserve and enhance riparian habitat.
- c. Maintain and enhance water quality.
- d. Maintain and enhance wildlife and fisheries values with special emphasis and priority given to the Limestone Salamander and its habitat.
- e. Maintain a diversity of land based and water based recreation opportunities.
- f. Minimize long term human influence outside of existing and proposed development sites.
- g. Meet Mariposa County water management needs with minimal environmental impacts to the river.
- h. Eliminate and prohibit residential occupancy of the Wild and Scenic corridor under BLM administration.
- j. Acquire private land within the Wild and Scenic corridor by exchange, easement, sale or other voluntary means.
- k. Maintain an appropriate level of use in order to provide the desired recreational experience.

### **IV. THE MANAGEMENT PROGRAM**

#### **A. Wild and Scenic River Corridor Description**

The Wild and Scenic River Corridor is one quarter mile wide on both sides of the river measured from normal high water level. The corridor runs from El Portal to the 867-foot elevation of Lake McClure.

A complete description of the flora and fauna as well as a physical description of this corridor can be found in the South Fork Merced and the Merced Wild and Scenic River Boundary Environmental Assessment, July 1989.



## B. River Segments

The Merced River was divided into three segments for planning purposes. The boundaries between segments were based on the types and levels of existing development, access, recreation opportunity and potential for classification as a unit separate from adjacent segments [MAP 2]. The following three segments and classifications are:

<u>SEGMENT</u>	<u>WILD &amp; SCENIC RIVER CLASSIFICATION</u>	<u>LENGTH</u>
Redbud Put-in - Briceburg NPS/USFS/BLM	Recreation	14 miles
Briceburg - Mtn. King Mine BLM	Recreation	6 miles
Mountain King Mine - 867' Lake McClure BLM	Wild	3 miles

## C. Segment Description and Management Actions

### 1. Redbud - Briceburg Segment [MAP 3 & 4]

This segment begins at Redbud Put-in(NPS) and extends downstream approximately 14 miles to Briceburg Bridge. Access is provided by Highway 140 bordering the river on the south side and Incline Road (the Old Yosemite Valley Railroad Grade) bordering the river on the north side. Foresta Bridge provides a means of access connecting Highway 140 to Incline Road.

Between Foresta Bridge and Briceburg the vegetation is mostly oak-pine savannah. There is a narrow strip of riparian habitat with a background of chaparral and annual grasses. Medisentimentary rocks are found in this segment. They date back 200 million years and attract geological field trips to the Ned's Gulch area.

There are two rafting put-in sites, one at Redbud and one at Cranberry(USFS). Picnic sites are available at Redbud Picnic Area. Camping is available at USFS Indian Flat Campground, and along Incline Road. Take-out sites are located at Suspension Bridge and Briceburg(BLM).

The largest attraction in this segment is the Merced River and related water activities. The river offers challenging whitewater, dropping at a rate of 58 feet per mile for the first seven miles. Spring run off ranges up to 10,000 plus cubic feet per second. This attracts experienced whitewater boaters to the area. Rapids such

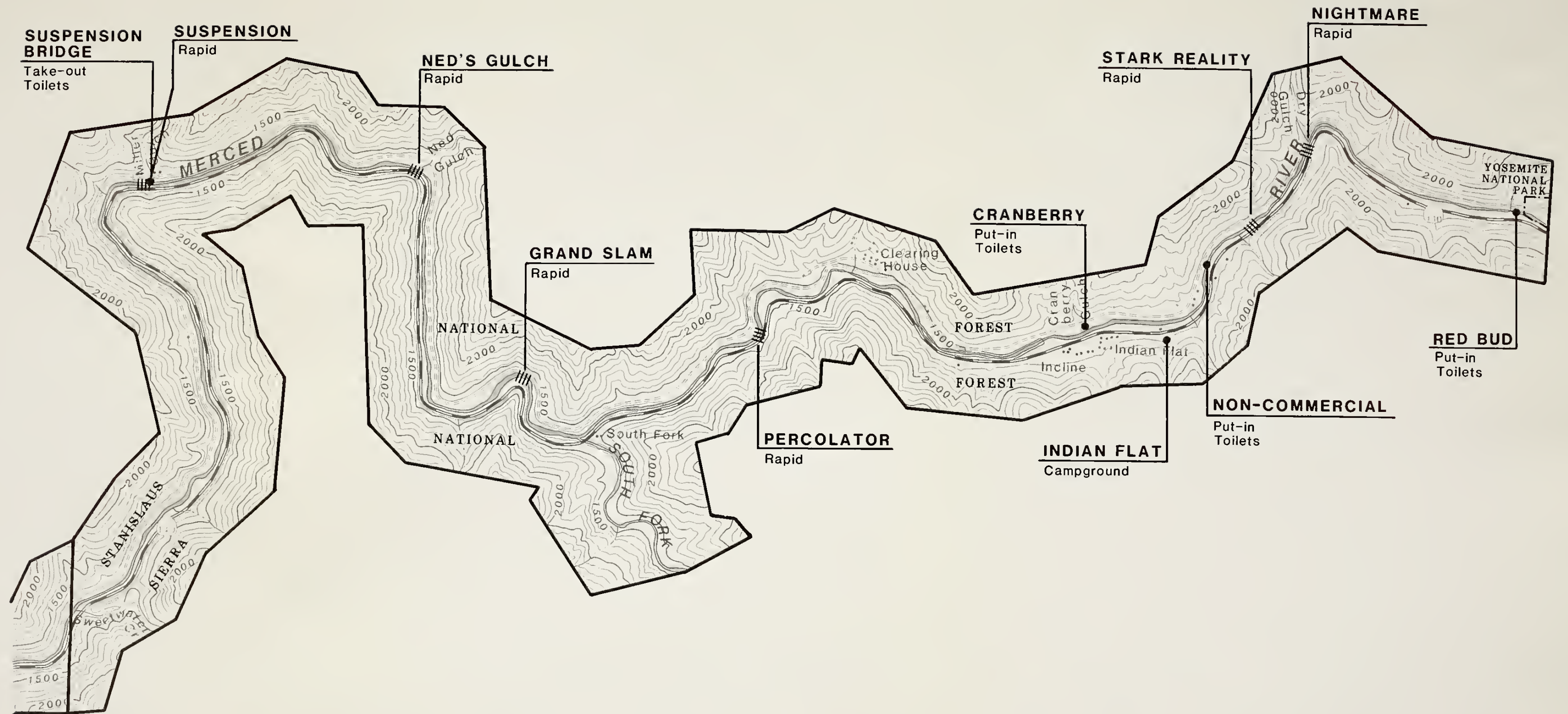






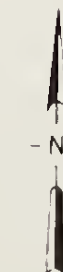






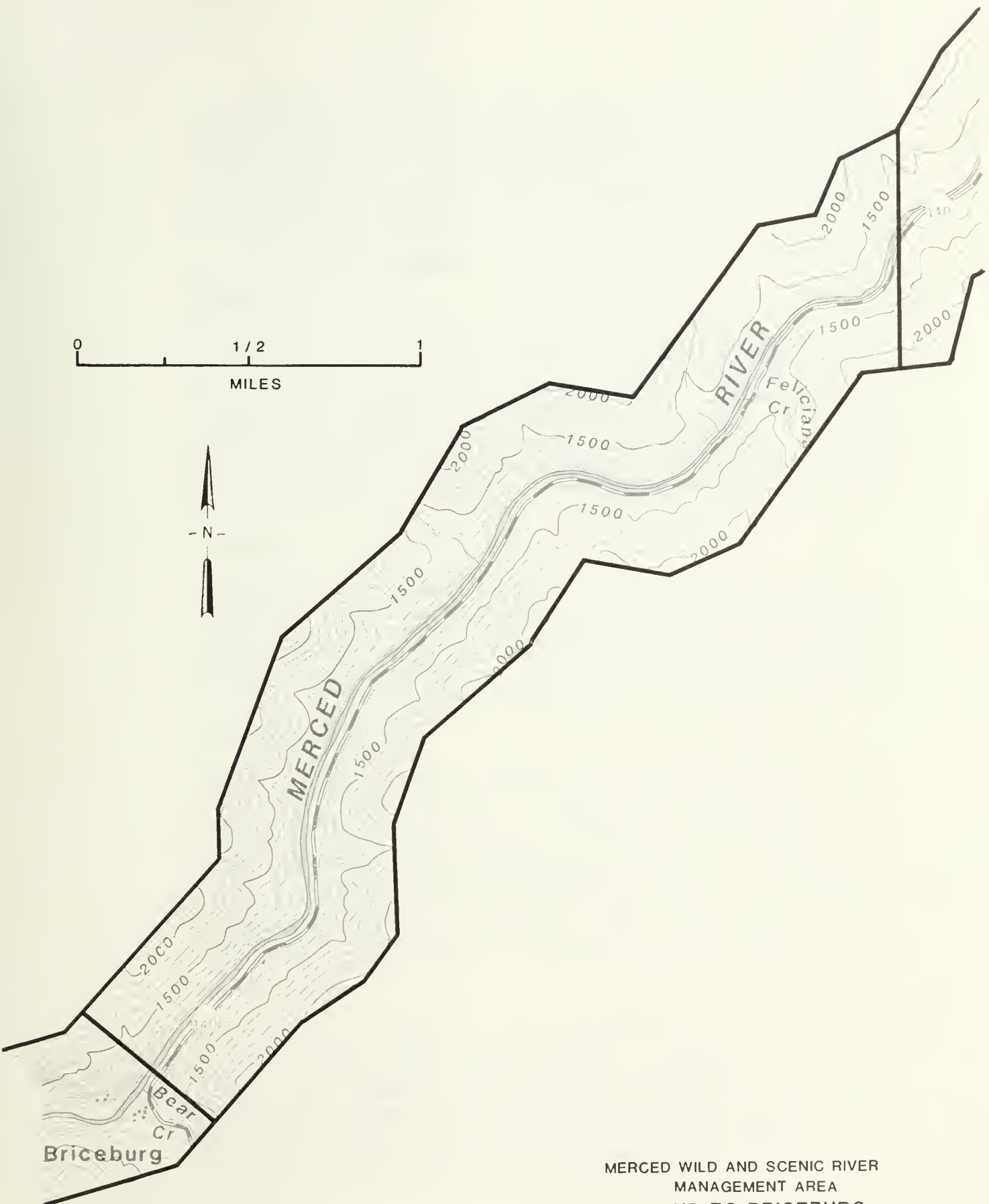
|||| Major Rapid Location

0 1/2 1  
MILES



MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
REDBUD TO BRICEBURG  
RECREATION FACILITIES  
AND  
MAJOR RAPID LOCATION





MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
REDBUD TO BRICEBURG  
RECREATION FACILITIES  
AND  
MAJOR RAPID LOCATION





as Nightmare, Chipped Tooth, Stark Reality, Percolator, Grand Slam and Ned's provide an exhilarating whitewater experience. From Ned's rapid downstream to Briceburg the river drops at a rate of 36 feet per mile, offering a more relaxing, peaceful floating experience, intermingled with class II rapids.

a. Management Issues

**Redbud**

Management problems associated with recreation are related to congestion and overcrowding. Commercial and private boaters use Redbud as a put-in. Redbud put-in is a small, confined area which can only handle one commercial company or three non-commercial groups launching at a time. Everyone must park their vehicles on the shoulder of the road after unloading their gear and passengers. This leads to overcrowding and congestion.

**Cranberry**

Cranberry is the other identified take-out area which receives heavy use. This is especially true when the water flows are too high to put-in upstream. Parking and camping near Cranberry is normally sufficient. Private boaters occasionally use other less desirable put-in sites in order to avoid congestion.

**Suspension Bridge**

Recently, most private boaters have put-in upstream near El Portal and floated to Suspension Bridge where they take out at Highway 140. Commercial outfitters also stop at Suspension Bridge to pick up lunch items. The combination of private boaters taking-out and outfitter shuttle buses at this location creates a dangerous situation along the highway. The north side of the Merced River on the Railroad Grade is an adequate area for three or four commercial groups to stop for lunch.

**Incline Road**

Traffic and parking has been a problem for residents on Incline Road. Problems include: Parking on private property, blocking traffic, speeding, camping north side of the road, unsafe fires, too much noise, and littering. Other environmental concerns found on this segment are: (1) erosion near the put-in sites caused by transporting rafting and kayaking gear to the waters, (2) deposition



of human waste, (3) litter, (4) vandalism, and (5) bathing in the river.

b. Management Actions, Rationale and Costs

Action 1. Improve the parking area and put-in site at Redbud

Parking is congested and the transfer of rafts and equipment from vehicles to the river results in road congestion and logistics problems for commercial and private boaters. Increasing the parking area size and improving parking arrangements will reduce congestion. An expanded and improved put-in site will decrease congestion and reduce the time required to prepare and launch river rafts. The parking area improvement will cost \$5000 and the put-in site improvement will cost \$2000. Development will be completed in 1990.

Action 2. Improve launch site at Cranberry.

When water flows on the Merced are too high to put-in at Redbud, the Cranberry put-in receives a high degree of use. Due to the small size of this put-in site the transfer of rafts and equipment from vehicles to the river results in logistic problems between private and commercial boaters. An expanded and improved put-in will decrease congestion and reduce the time required to prepare and launch river rafts. The put-in improvement will cost \$2000 and be completed in 1990.

Action 3. Develop a put-in site for the exclusive use of private boaters.

A private boaters put-in site will decrease congestion at Redbud. This will improve efficiency and minimize conflicts for commercial and private boaters. Private boaters will not be hindered or rushed in order to accommodate the needs of the commercial operators who must outfit several rafts, provide safety briefings and other commercial necessities before launching. The put-in will cost \$2000 and be completed in 1990.

Action 4. Locate two 1,000 gallon toilets at Redbud.

Increased use of this area requires additional sanitation facilities. This will improve user comfort and decrease odors. The installation of two toilets will cost \$15,000 and be completed in 1990.





Action 5. Locate two 1,000 gallon toilets at Cranberry.

Increased use of this area requires additional sanitation facilities. This will improve user comfort and decrease odors. The installation of two toilets will cost \$15,000 and be completed in 1990.

Action 6. Locate a self-contained toilet at Suspension Bridge.

Suspension Bridge is used as a intermediate stopping point and as a take-out for private boaters. A toilet is needed for basic sanitation. Toilet installation will cost \$5000 and be completed in 1991.

Action 7. Locate a self-contained toilet at private boater put-in site.

A toilet will be needed for basic sanitation. It will cost \$5000 and be completed in 1990.

Action 8. Acquire 3 parcels of land (360 acres).

Acquisition of these parcels will protect the river from incompatible use and ensure the public the widest range of management options. Acquisition of these parcels will cost approximately \$360,000 and will occur as the parcels become available.

**2. Briceburg - Mountain King Mine Segment[MAP 5]**

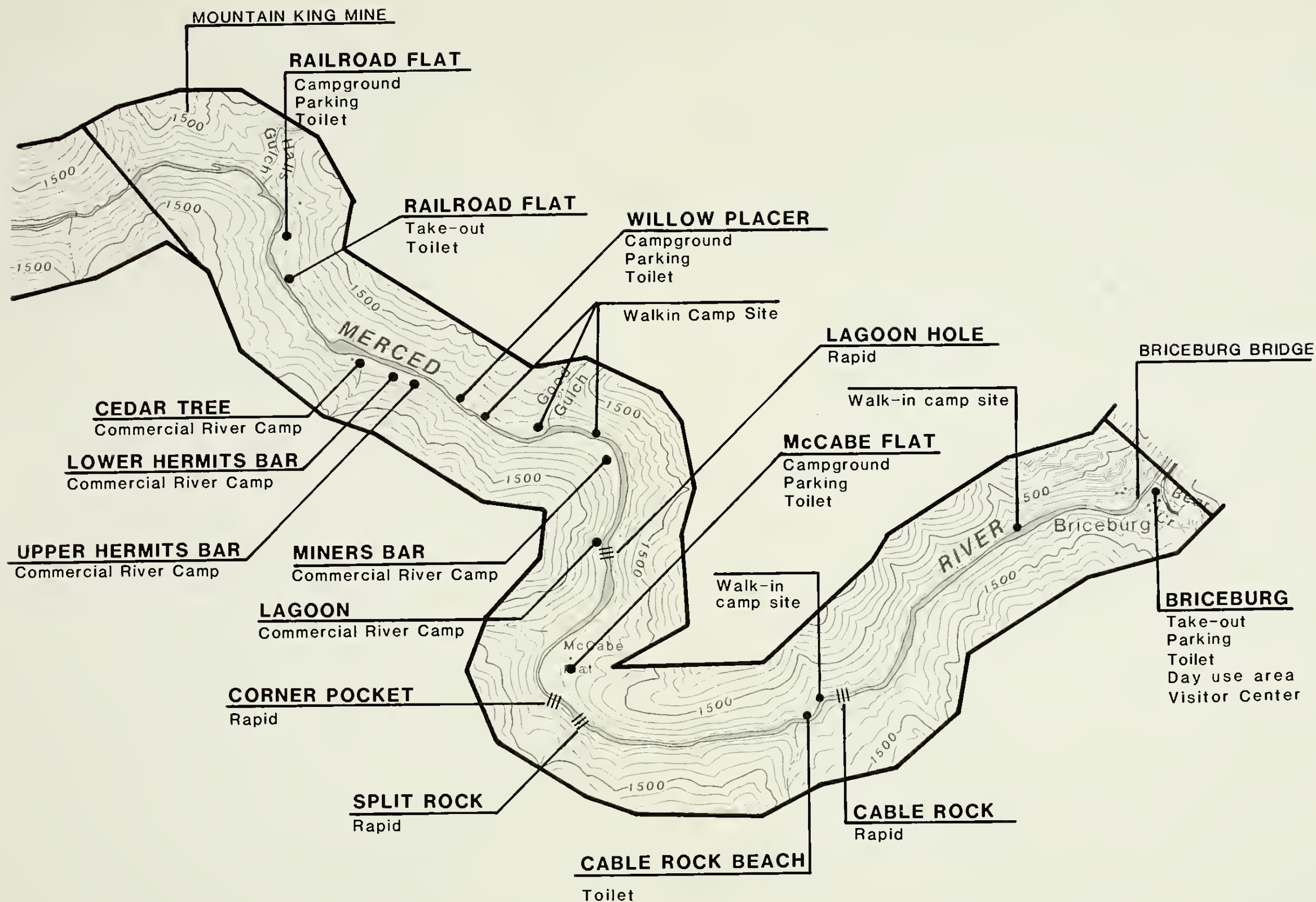
The boundaries of this segment begin 300 feet above Briceburg at the Bear Creek confluence and extends downstream six miles to the Mountain King Mine. Access to this segment can be obtained by boating the river or by vehicle along the Railroad Grade road.

a. Description

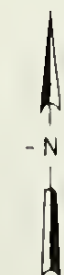
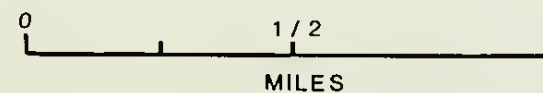
This stretch of river has moderately swift water interspersed with numerous rock strewn rapids. Notable rapids are "Split Rock" and "Corner Pocket", two of the most exciting rapids on the river. Scenery on river left is very steep and brushy with some conifer trees. There are magnificent views of unspoiled scenery. On river right, there are scattered oak woodlands, brush fields and drier vegetation types. The road, developed campgrounds and most evidence of human impacts occur on river right.

Wildlife and wildflowers are important values prevalent on this river segment. Especially significant are





||| Major Rapid Location



MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
BRICEBURG TO MOUNTAIN KING MINE  
RECREATION FACILITIES  
AND  
MAJOR RAPID LOCATION

MAP-5



habitat for the threatened limestone salamander(See Appendix B), bald eagle roosts and the abundant wild flower displays that attract viewers each spring.

This river segment possesses exceptional resource values and a wide variety of uses.

b. Management Issues

**Briceburg**

Briceburg is the vehicular entrance to the lower river and is located near the confluence of Bear Creek, the Merced River and Highway 140. A building of historical and architectural interest exists at this location.

The historic building is currently in poor condition. The roof and wooden portion of the building needs repair, while the stone work and structural composition of the walls appears sound.

The put-in and take-out areas for rafters are sub-standard and should be improved. Access off of Highway 140 is through a narrow, dangerous turn-off with inadequate sight distance. It is a dangerous entrance especially for motor homes, trailers, or other slow moving vehicles.

The river is spanned by the Briceburg Bridge, an old bridge 16 feet wide with a 12 ton weight capacity. Campers, motor homes, trailers and buses have difficulty crossing the bridge due to it's short, angled approaches.

**Railroad Grade Road**

The Railroad Grade road is 12 to 18 feet wide and has a semi-graveled surface. It parallels the river for the entire length of this segment. The road is subject to minor landslides, narrow widths, potholes and erosion. The road is not wide enough to accommodate the heavy traffic volumes during the spring whitewater rafting months. There are few pullouts and conflicts with commercial busses is common.

The road serves all river users. Suction dredgers, sightseers, rafters and other boaters, fishermen, hikers, mountain bikers and others move up and down river on the single lane road. Overall river use is estimated to be 25,000 visitor use days on this river segment. Campers use the road to reach the three developed campgrounds at McCabe Flat, Willow Placer and Railroad Flat.





### **McCabe Flat, Willow Placer and Railroad Flat Campgrounds.**

Each campground provides from 4 to 8 campsites. Sanitation facilities of poor quality are provided at each campground. No potable water is provided, tables and fire pits are available.

There is competition for campsites during peak use periods. Parking is inadequate near McCabe Flat and Railroad Flat for rafting support vehicles. Off-road vehicles are frequently irresponsibly operated in campgrounds. Cattle occasionally drift into the river corridor causing sanitary problems within the campgrounds and along the river.

### **Recreational Placer Mining (Suction Dredging).**

Suction dredging creates a high level of use conflict. Dredging physically alters the river bed. It creates subsurface holes, alters the approach to and the character of river rapids and creates varying degrees of siltation and silt deposition. Dredging creates noise, some minor petroleum product spills, results in the placement of ropes and cables across the river to secure dredges, and brings long term camping or occupancy along the river.

Recreationists often find that the results of dredging interfere with or degrade the quality of their experience. In the worst cases, cables and ropes can be potentially lethal hazards to boaters. Less severe but significant is the loss of recreational opportunities that require clear water such as fishing and swimming. This area was especially popular with local residents as a swimming area. Dredging activities have adversely affected such day use.

### **Carrying Capacity**

River use is subject to considerable use competition and conflict. This is a result of superimposing many uses in a narrow corridor of high resource value and sensitivity. Reliable visitation figures and impacts of users on the environment and on user satisfaction is not known. Visitor monitoring and trend studies have not been established.

Over 10,000 rafters and boaters "run" the river. Most do it from May through July. As the water levels recede swimmers, inner tube floaters, fishermen and suction dredgers begin to use the river more.



## **Unauthorized Occupancy**

A source of major conflict has been the occupation of, at one time, up to 40 substandard, unauthorized shacks, derelict trailers, campers and black plastic lean-to's. The result was a rural slum that visitors found intimidating and inconsistent with their interests in using the public lands for recreation. This problem has been reduced but not eliminated.

## **Saxon Creek Water Development**

An important potential for meeting Mariposa County water needs exists in this river segment at Saxon Creek. This proposal intends to extract water from the river and transport it by underground pipeline to a reservoir near Mariposa (See Appendix A).

### **c. Management Actions, Rationale and Costs**

#### **Action 9. Improve the entrance to the Merced River Corridor at Briceburg**

A safe, attractive entrance is needed to encourage use of the lower river and to create an image of a safe, well maintained public recreation area. Site improvement will include improving traffic safety problems (sight distance on Highway 140) and general site improvement. A large sign is needed on Highway 140 to identify the entrance to the lower river and to show it's status as a wild and scenic river. Sign construction and installation will cost \$1000 and other site improvements will cost \$10,000 and be completed in 1990.

#### **Action 10. Complete Restoration of the historic building at Briceburg**

Restoration of Briceburg will preserve a historic structure and provide a facility for visitor contact and information. The overall objective of the site is not to provide general visitor use information for highway traffic on Route 140, but to target the users utilizing the river corridor for commercial and private rafting information. Restoration will cost \$40,000 and be completed in 1990.

#### **Action 11. Repair the Briceburg Bridge**

Repair of the bridge approaches, repainting the superstructure and general repairs are necessary to keep



the bridge safe and operational. Repair and upgrading the bridge will cost \$30,000 and be completed in 1995.

Action 12. Improve the Briceburg boaters launch site and take-out area

The large launch site and take-out area at Briceburg needs to be leveled and surfaced with gravel, launch access to the river needs to be improved, two toilets installed, and parking provided to ensure safe, convenient and enjoyable use of the area. Site improvement and the installation of two toilets will cost \$18,000 and be completed in 1991.

Action 13. Develop parking areas at Briceburg

In addition to parking for boaters at Briceburg, additional parking will be provided behind the Briceburg Information Center to enable visitors to walk to the Information Center without crossing Highway 140. In addition, Briceburg provides a convenient intermediate starting location for people using the bike/hiking trail along the railroad grade, upriver to El Portal. Site development will cost \$7000 and be completed in 1991.

Action 14. Maintain and improve the Railroad Grade road

The road will require grading, occasional resurfacing with gravel, culverts, and bank stabilization. Routine maintenance will keep the road safe and passable. Maintenance and further improvement of the road will cost \$50,000 and be completed in 1992.

Action 15. Provide eight campsites on river left

These campsites will be primitive camps with fire rings and a fire line around them. This gives commercial outfitters and private boaters campsites that serve their needs and reduces crowding of campsites used by those who use road access. Development of eight river camps will cost \$4000 and be completed in 1991.

Action 16. Provide 20 camps for hikers

These camps will be located at various points along the river to give hikers and campers opportunities to camp outside of developed campgrounds and away from the river camps. This increases the diversity of camping





opportunities. Development will cost \$1000 and be completed in 1993.

Action 17. Renovate McCabe Flat, Willow Placer and Railroad Flat Campgrounds

These campgrounds require better site design, new toilets, and water systems. Vehicle parking, better access, and vehicle turnarounds are needed. These improvements will make the campgrounds cleaner, safer and more enjoyable to use. Renovation and development will cost \$100,000 and be completed in 1992.

Action 18. Improve the rafting take-out near Railroad Flat

This take-out area is used primarily by commercial outfitters. A large, graveled parking area is needed for their buses, vans and trailers. A wide, smooth trail from the river to the parking area will allow rafts, equipment and passengers easy access to their vehicles. These improvements will make the take-out less dusty, safer, quicker and more enjoyable for passengers, guides and bus drivers.

A trip ticket box will be installed to keep track of river use. Site improvement will cost \$1000 and be completed in 1990.

Action 19. Eliminate livestock grazing between the river and the Railroad Grade (See Appendix C).

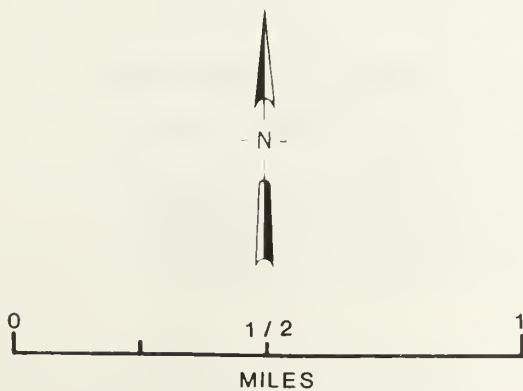
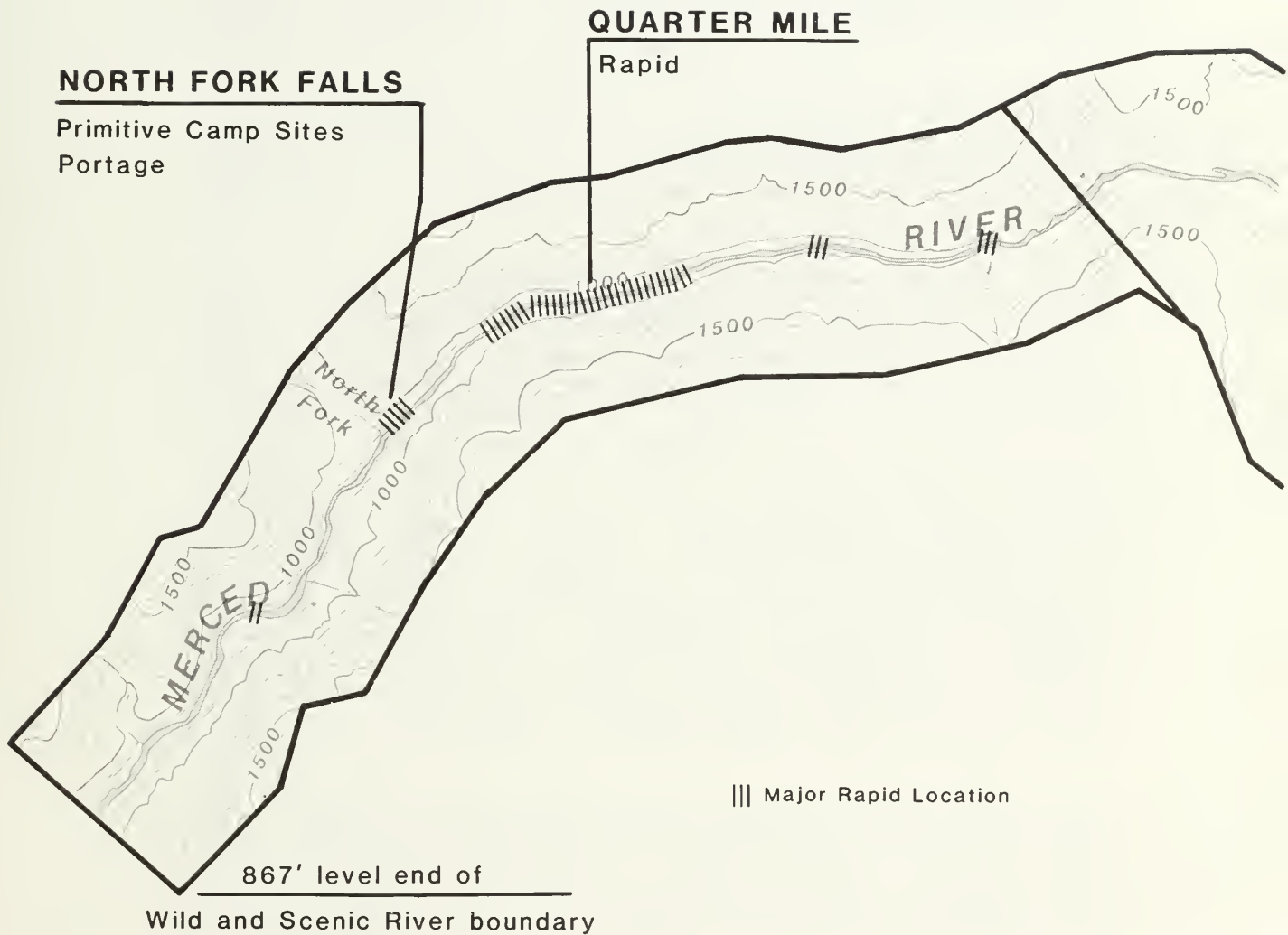
This will prevent grazing induced damage to riparian zones. This will also prevent conflicts between cattle and people in the campground areas and on the Railroad Grade road. Removal of an old fence in the river corridor and construction of new drift fence outside of the river corridor will be necessary. Fence removal and construction will cost \$4000 and be completed in 1993.

3. **Mountain King Mine - Lake McClure 867-foot level[MAP 6]**

a. Description

The boundaries of this segment begin below the Mountain King Mine patented claim and extend downstream approximately 3 miles to the 867-foot level of Lake McClure. The entire segment is classified as "Wild". Access is limited to white-water boaters, hikers, mountain bike riders and equestrian users.





MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
MOUNTAIN KING MINE  
TO  
LAKE McCLURE 867' LEVEL  
**RECREATION FACILITIES  
AND  
MAJOR RAPID LOCATION**



The last segment of the river contrasts greatly with the first two segments. The first few miles of this segment from the Mountain King Mine downstream have a high gradient and numerous rapids. The famous "Quarter Mile Rapids" terminate with the North Fork waterfalls where the North Fork of the Merced River joins the main Merced River. The river then gradually declines in gradient until it reaches the calm high water of Lake McClure at the 867-foot elevation or below.

No road parallels the river. The railroad grade does not support vehicle traffic along this segment so mechanized equipment is limited to suction dredges or occasional unauthorized off-road vehicles which find their way to the river.

Solitude and an absence of man's intrusion characterizes this segment although hints of historical uses dot the river corridor. There are parts of old railroad trestles, a flume, a small diversion dam, the remains of a powerhouse foundation and remnants of transmission lines and poles. These are unobtrusive and give a sense of history to this river segment.

Competing uses are less evident. Fewer boaters, campers or dredgers use the area. Those who do choose to use this area face challenges. Boaters must portage the North Fork Falls, dredgers must carry their equipment to their dredging sites, everyone must hike and carry their equipment with them. Fishermen prefer this segment, especially, near the North Fork confluence for small-mouth bass. Rafting companies stop at the North Fork for lunch and rest stops. Many people hike up the North Fork.

This segment is surrounded by the Merced Wilderness Study Area. The north facing slopes of the river are steep, unscarred and undisturbed. They provide a spectacular backdrop for the river viewed from the hiking trail. From the high water mark of Lake McClure to Bagby the river is a flatwater reservoir.

#### b. Management Issues

##### **North Fork Falls Portage**

Currently all river runners must portage the North Fork Falls. The portage requires users to negotiate steep inclines, lifting their rafts approximately 30 feet to





the railroad grade. BLM in cooperation with the river users developed a portage, including a pipe rack to make potage easier. Even with this portage, groups with less than four or five find it impossible to lift the boats up this pipe rack. This portage severely limits the use on the lower river.

### **Primitive Campsites**

The North Fork of the Merced's junction with the mainstem Merced River is a popular location for camping. Currently there is a lack of developed camp sites, especially fire rings in the area. Some primitive campsite development should be completed to reduce fire hazard in the area and to guide users to preferred campsite locations.

### **Potable Water**

Drinking water is not available in any of the Bureau's river segments. This not a problem on the recreational segments as water can be hauled by vehicle in these areas. Vehicle access is not allowed in the wild segment therefore a reliable water source would be convenient in this segment. There is one spring site located in this segment with the potential for development as a potable water source.

### **Railroad Grade Access**

The lower two miles of the railroad grade is located below the high water level of Lake McClure on lands owned by the Merced Irrigation District. Additional legal access or cooperative management is needed to assure public access on the railroad grade.

### **Highway 49 Take-out**

This take-out is not located within the boundaries of the Wild and Scenic River corridor. It is however an important facility for public use of this river segment. Currently the access to the lower Merced River is owned by the Merced Irrigation District and is under concession lease for a commercial marina. The marina charges rafters an access fee for taking out of the river.

### **b. Management Actions, Rationale and Costs**

#### **Action 20. Improve portage at North Fork Falls**

Improved portage facilities will increase user enjoyment, minimize potential injury to users and damage to



equipment. Improvement will cost \$5000 and completion is scheduled in 1991.

Action 21. Develop three primitive campsites

Three campsites with fire rings will be placed at the North Fork confluence, a popular camping area. Site development will cost \$500 and be completed in 1992.

Action 22. Develop a potable water source in this segment

There is an excellent spring along the railroad grade which could provide a dependable and safe source of water for hiker and mountain bike riders. The spring would be developed for their benefit. Spring development in this area will cost \$2000 and be completed in 1993.

Action 23. Acquire a 2-mile-long easement from the Merced Irrigation District.

Completion of a hiking/mountain bike trail from Bagby to points east will require an easement through the Merced Irrigation District property at Lake McClure. The easement will be negotiated in 1992. Support costs for this action will be \$10,000.

Action 24. Acquire 320 acres

Acquisition of two 160 acre parcels owned by the Merced Irrigation District will improve manageability of the river corridor. The acquisition of the parcels is scheduled to be completed in 1992, as the result of a land exchange between the Bureau and Merced Irrigation District. Support costs for this action will be \$12,000.

Action 25. Provide trailhead access on river right at the Highway 49 bridge.

Access is needed on river right to eliminate the need for walking along or across the highway to reach the trailhead. Access development will cost \$15,000 and be completed in 1993.



#### D. Management Actions Common to All River Segments

##### Action 26. Administration of Whitewater Boating Activities

Commercial rafting will continue to be managed under the present system of permits and use allocation. Thirteen permits resulting in about 10,000 visitor days use will continue. Reallocation of use will continue using the methods described in the monitoring section of this plan. BLM will continue to manage the rafting activity on Sierra National Forest under a Memorandum of Understanding and will periodically review management actions affecting this activity. Administration will include periodic river patrols, permit inspection and compliance. This will require establishment of two permanent (not to exceed 6 months per year) river ranger positions and temporary visitor service personnel.

##### Action 27. Establish River Corridor Carrying Capacity.

BLM will monitor the visitation within the river corridor and will establish specific carrying capacities, defining use limitations, if warranted, to resolve safety, sanitation, or user conflicts or prevent adverse impacts to the natural environment. These studies will focus on commercial/private whitewater rafting allocations and use of the lower canyon, from Briceburg to Railroad Flat (See Monitoring).

##### Action 28. Trail Construction - Old Yosemite Railroad Grade

A hiking, equestrian and mountain bike trail is proposed from Bagby to El Portal. Suitable trail will be reconstructed along the railroad grade. About 5 miles of the 23-mile trail will require reconstruction to remove rock slides and construct stream crossings. Most reconstruction will occur between Bagby and the Mountain King Mine. The construction of the lower trail, above Lake McClure, is located within a WSA. No improvement will occur until the wilderness issue is resolved. Trail construction will cost \$50,000 and be completed in 1994, pending resolution of WSA status.





Action 29. Develop a Interpretive Plan for the River Corridor.

An interpretive plan will address the appropriate level of visitor communication needs for the river corridor. It will identify the signing, brochure, and communication needs and the most appropriate locations for signing. The plan will integrate and assure a coordinated approach to information needs.

Information signs identifying the area as a Wild and Scenic River are needed on Highway 140. Signs showing locations of campgrounds, and rafting put-in and take-out areas will cost \$8000 and be completed in 1991.

Pamphlets, maps and other interpretive materials will be used to inform visitors of the resources and facilities available for use. Kiosks will be used for this purpose at put-ins and in the three developed campgrounds. All materials will cost \$6,000 and be completed in 1992.

Action 30. Install a water level/gauge at Briceburg Bridge

A gauge will allow river users and guides to estimate flows on the Merced Rivers lower segments. Users will be better informed of river conditions which will assist in a safety conscious attitude. The cost of the gauge will be \$1000.

Action 31. Mineral Withdrawal

The nature of this river and the high demand for diverse recreational uses require that the Merced River streambed/ Railroad Grade withdrawal be completed. This will ensure the river and all improvements will be available for the use and enjoyment of all citizens in the future. Further justification of the withdrawal is included in the Appendix D.

Action 32 . Complete Validity Determination on Existing Mining Claims (See Appendix E)

Unpatented mining claims will be examined to determine their validity on a case-by-case basis. Since prior existing rights, especially mining claim rights, influence the character and use of the river corridor it is important to determine if such rights actually exist. Mining claim validity determinations will be conducted where operations are not compatible with the objectives of the river management plan.



Action 33.      Minerals Management

Lands within the recreational segments of the river corridor and outside of the Merced River streambed/Railroad Grade withdrawal will remain open to mining claim location. Plans of operation under 43 CFR 3809 will be required for all activities that would exceed the level of casual use as defined in 43 CFR 3809.0-5(b). Such activities include the use of mechanized earth moving equipment, the operation of motorized drilling, sluicing and dredging equipment, and the placement of structures on the land. In accordance with the guidelines of this river management plan, no residential occupancy will be allowed, but structures related to the explorations, mining and/or milling of mineral ores will be allowed on a case-by-case basis. Structures related to residential occupancy are prohibited. All mining operations will conform to management requirements for mining on the Merced River. These requirements integrate mining with recreation and resource protection.

Action 34 .      Develop a permit system to administer placer gold mining of the Merced River streambed (suction dredging) and identify specific locations and stipulations for administration (See Appendices F & G).

In areas not open for mining, or areas not previously claimed under the mining law, suction dredging may be managed as a recreational activity under permit. The location and periods of use will be specified, taking into consideration whitewater activities, impacts to river ecosystems, etc.

Action 35 .      Implement Bureau Ranger Patrols and Cooperative Law Enforcement Agreements

A BLM Ranger will patrol the river corridor to help visitors and provide for the safe use and enjoyment of the river. The Mariposa County Sheriff's Office will continue to support the Bureau through a cooperative agreement and will patrol the river corridor and other Bureau lands in the county.

Action 36.      Develop a Fire Management Program

An aggressive fire prevention program will be instituted in this area, through public information and education as well as specific fire prevention actions in public use areas. The threat of wildfire within the river corridor during the heavy use periods is high and a visitor awareness program should help to control wildfire.



The control of wildfire situations in the corridor will be conducted in a manner to prevent permanent resource damage to the corridor. Specific limitations on fire suppression include the prohibition against bulldozer use for fire suppression in the corridor (See Appendix H).

Action 37. Establish Visual Resources Management Classes I and II

The Wild and Scenic Rivers Act specifically identified scenery as an important resource which should be preserved and enhanced, regardless of the river classification. All designated river segments will be managed as VRM Class I and all public lands within the viewshed of the river will be managed as VRM Class II. This will allow management activities to occur but will not degrade the visual quality.

Action 38. Encourage the use of Campground Hosts.

Campground hosts have proved to be a cost effective method of providing visitor assistance and may be used to help inform and assist visitors in the use and enjoyment of the public lands. Campground sites, dedicated to host positions, will be considered.

Action 39. Develop Supplementary Rules

Development of supplementary rules provides BLM the authority to control unauthorized use which may develop. Rules will be published which are needed for the safe and orderly use of resources and facilities within the river corridor. Existing rules and general guidelines are shown on Appendix I.

Action 40. Prohibit Off-Road Vehicle Events

Off-road vehicle events will not be permitted within the Wild and Scenic River corridor. All motorized vehicles will be limited to existing roads.

Action 41. Prohibit residential occupancy on public lands within the Wild and Scenic River corridor.

Residential occupancy of public lands is inconsistent with the free use and enjoyment of the public lands within the Wild and Scenic River corridor.





# V. IMPLEMENTATION SCHEDULE, COSTS AND SUPPORT NEEDS

## COST

ACTION		1990	1991	1992	1993	1994
Action 1	Redbud Parking Put-in	7,000				
Action 2	Cranberry Put-in	2,000				
Action 3	Private Boater Put-in	2,000				
Action 4	Redbud Toilets	15,000				
Action 5	Cranberry Toilets	15,000				
Action 6	Suspension Bridge Toilet	5,000				
Action 7	Private Boaters Toilet	5,000				
Action 8	Land Acquisition Segment 1					360,000
Action 9	Briceburg Entrance	11,000				
Action 10	Briceburg Building Restoration	40,000				
Action 11	Briceburg Bridge Repair					30,000
Action 12	Briceburg Launch & Take-out		18,000			
Action 13	Briceburg Parking		7,000			
Action 14	Railroad Grade Road Improvement			50,000		
Action 15	8 River Campsites		4,000			
Action 16	20 Hiker Campsites			1,000		
Action 17	Campground renovate and develop			100,000		
Action 18	Railroad Flat Take-out	1,000				
Action 19	Fence removal and construction				4,000	
Action 20	North Fork Portage		5,000			

Sub-totals \$ 103,000 34,000 151,000 4,000 390,000



ACTION		1990	1991	1992	1993	1994
Action 21	3 North Fork Primitive Campsites			500		
Action 22	Develop Spring for Drinking Water				2,000	
Action 23	MID Easement Wild Segment			10,000		
Action 24	Land Acquisition Wild Segment			12,000		
Action 25	Highway 49 Trail Access					15,000
Action 26	Whitewater Permit Administration	3wms	3wms	3wms	3wms	3wms
Action 27	Establish Carrying Capacity	1wm	1wm	1wm	1wm	1wm
Action 28	Trail Construction Railroad Grade					50,000
Action 29	Interpretive Plan & Materials		8,000	6,000		
Action 30	River Level & Flow Guage	1,000			-	
Action 31	Mineral Withdrawal	3wms				
Action 32	Validity Exams		3wms	3wms	3wms	
Action 33	Minerals Mgmt.	N/A				
Action 34	Permits for Suction Dredge	1wm	1wm	1wm	1wm	1wm
Action 35	Ranger Patrols	3wms	3wms	3wms	3wms	3wms
Action 36	Fire Program	$\frac{1}{2}$ wms	$\frac{1}{2}$ wms	$\frac{1}{2}$ wms	$\frac{1}{2}$ wms	$\frac{1}{2}$ wms
Action 37	Establish VRM Class	N/A				
Action 38	Encourage Hosts	N/A				
Action 39	Develop Suppl. Rules	N/A				
Action 40	Prohibit ORV Use and Events	N/A				
Action 41	Prohibit Residetial Occupancy	N/A				

Sub-totals WM		11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	8 $\frac{1}{2}$ wms
\$		1,000	8,000	28,500	2,000	65,000
TOTAL WM		11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	11 $\frac{1}{2}$ wms	8 $\frac{1}{2}$ wms
\$		104,000	42,000	179,500	6,000	455,000



## VI. MONITORING

Two well accepted concepts of recreation management were incorporated into the planning process. The Recreation Opportunity Spectrum (ROS) provided a framework for inventory and planning. The Limits of Acceptable Change (LAC) concept was used to develop strategies for managing use. The following is a brief description of these concepts.

### Recreation Opportunity Spectrum

The Recreation Opportunity Spectrum (ROS) approach to recreation planning is based on a behavioral definition of recreation. The ROS concept emphasizes that quality in outdoor recreation can best be achieved by providing a diversity of recreation opportunities to satisfy people's varying tastes and preferences. Recreation researchers have defined this diversity of opportunities along a spectrum ranging from primitive to urban.

The ROS concept that recreation opportunities consist of activity, setting, and experience opportunities was used to inventory existing conditions as well as to define the recreation opportunities to be provided. The descriptions of settings were divided into three categories, physical, social, and managerial.

### Limits of Acceptable Change

The Limits of Acceptable Change (LAC) concept has been developed as a supplement to carrying capacity determinations. It is based on the premise that recreational use of an area can diminish the quality of both the natural environment and the recreation experience. Concern about overuse causing negative impacts on the ecological and social environments of an area has led managers to try to establish carrying capacities. This approach has focused attention on the amount of use and the search for a specific number of people that can be allowed to use an area without causing unacceptable changes to the natural environment or the recreation experience.

In applying the LAC concept, managers assume that change to the ecological and social conditions of the area they are managing is going to occur, due to both natural and human factors. The goal of management then is to keep the character and rate of change due to human factors within acceptable levels.





According to the LAC scheme, managers first develop management objectives for the area they are managing and describe the recreation opportunities that will be provided. They then identify the ecological and social factors that are likely to change and select indicators which can be easily observed and used as a gauge to determine the amount of change that is occurring. For each indicator, managers then set a standard, which is a threshold value which defines the amount of change that is acceptable and unacceptable. The purpose of selecting indicators and standards is to provide managers with reference points so that they can judge whether the recreation opportunity they are trying to manage for is actually being provided over time.

The following tables identify the Indicators, Standards and Monitoring Procedures to be used for each of the river segments:



Table 1

Indicators, Standards, and Monitoring Procedures  
Redbud Launch Site - Briceburg

Indicator	Standard	Monitoring Procedures		
		Inventory Method	Sampling Procedure	Frequency
1. Congestion and Crowding at Redbud and Cranberry launch sites.	Each group must not take more than one (1) hour to launch before 1:00 p.m.	Visual Observation.	Record the length of delay in launching on randomly selected days.	Minimum of four (4) times per year.
2. Congestion and Crowding at Ned's Gulch Rapid.	Maximum of 40 minute wait.	Visual Observation.	Record the length of delay while on river patrol on randomly selected days.	Minimum of four (4) times per year, two week-end days will be included.
3. Groups encountered on river per day.	Maximum of 17 parties encountered on river per day. 7 Commercial 10 Private.	Visual Count.	Count and record group contacts on river patrols.	Minimum of four (4) times per year.
4. Litter.	Maximum of 10 occurrences viewable from water craft.	Visual Count.	Litter occurrence recorded on river patrols.	Minimum of four (4) times per year.
5. Erosion at launch site areas.	The single path area leading down to the rivers edge shall not be wider than 12 ft.	Photographic comparison and measure and record affected areas.	Litter occurrence recorded on river patrols.	Biannually (before and after season).
6. Congestion and Crowding - Take-Out Briceburg	Maximum of a 40 minute wait.	Visual Observation.	Record the length of delay while taking-out.	Minimum of four (4) times per day.



Table 2

Indicators, Standards, and Monitoring Procedures  
Briceburg Bridge - Mountain King Mine

Indicator	Standard	Monitoring Procedures		
		Inventory Method	Sampling Procedure	Frequency
1. Congestion and Crowding at the three (3) BLM semi-improved campgrounds	All groups must be camped in designated campsites.	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per year.
2. Congestion and Crowding at Miners Bar and Cedar Tree campsites.	Maximum of two commercial outfitters per night.	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per year.
3. Groups encountered on river per day.	Maximum of 17 parties encountered on river per day. 7 Commercial 10 Private.	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per year.
4. Campsite density on south side of river.	Out of sight, out of sound from other campers.	Visual Count.	Map and record campsite locations.	Annually.
5. Campsite numbers on south side of river.	Maximum of eight designated campsites.	Visual Count.	Count and record on river patrols.	Annually.
6. Litter	Maximum of 10 occurrences viewable from water craft.	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per year.





Table 2  
(continued)  
Indicators, Standards, and Monitoring Procedures  
Briceburg Bridge - Mountain King Mine

Indicator	Standard	Monitoring Procedures		
		Inventory Method	Sampling Procedure	Frequency
7. Human Waste	Zero	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per year.
8. Parking at McCabe Flat	Maximum of a 30 minutes per vehicle.	Visual Count.	Count and record on river patrols.	Minimum of four (4) times per day.



Table 3

**Indicators, Standards, and Monitoring Procedures  
Mountain King Mine - Lake McClure (867')**

Indicator	Standard	Monitoring Procedures		
		Inventory Method	Sampling Procedure	Frequency
1. Congestion and Crowding above Quarter Mile Rapid.	Maximum of one (1) hour delay in portaging equipment.	Visual Count.	Count and record on river patrols.	Minimum of two (2) times per year.
2. Groups encountered on river per day.	Maximum of ten (10) parties encountered per day.	Visual Count.	Count and record on river patrols.	Minimum of two (2) times per year.
3. Litter.	Maximum of five (5) occurrences.	Visual Count.	Count and record on river patrols.	Minimum of two (2) times per year.
4. Human Waste.	Zero occurrences viewable from water craft.	Visual Count.	Count and record on river patrols.	Minimum of two (2) times per year.
5. Campsite Density at North Fork Confluence.	Maximum of two camps out of sight and out of sound from other camps.	Visual Count.	Count and record on river patrols.	Minimum of two (2) times per year.



## VII. APPENDICES





## Appendix A

### SUMMARY SAXON CREEK PROJECT

This report presents the results of a study of water supply for Mariposa County. Numerous alternatives were studied, with the primary objective of developing water supplies for the Mariposa Township Planning Area (PA).

The projects presented were configured as minimum cost projects with the capability to supply the ultimate water demands of the TPA. The preferred project would also allow for possible future expansion to serve the Midpines Area and the Bootjack Area.

Since the project area is the Mariposa TPA, the most pertinent information would provide household incomes for the TPA. During the process of updating the Mariposa Specific Plan, the Planning Department developed household income data for the TPA and compared it with the rest of the County.

The average estimated household income in the TPA is \$11,867, which is only 72% of the average household income County-wide (\$16,447). It may be important to add that the County-wide average is one of the lowest in the State. Other interesting statistics indicate that the project area has a higher percentage of older people and people on public assistance than the rest of the County. The TPA also has a much higher percentage of rental housing (47%) than the County as a whole (22%), which coincides with the income statistics. There have been a substantial number of additional rental units constructed since this data was obtained.

The proposed project features are the pumping plant, the pipe line, a 1,000,000 gallon storage tank, the treatment plant and fire protection equipment.

The Saxon Creek Pumping Plant would be a reinforced concrete structure. The roof of the pumphouse would be approximately level with the surrounding ground. This feature would virtually not be visible from the surrounding area. The plant dimensions for the pumphouse would be about 25 feet by 15 feet and the floor of the pumphouse would be about 12 feet below the surface of the ground. The pumphouse would have two 36 inch diameter concrete pipes extending about 35 feet below the pumphouse floor to serve as wet pits. The pumphouse intake would consist of an 18 inch diameter pipe extending from the bottom of each wet pit to an 18 inch diameter perforated steel pipe buried in a gravel-filled trench in the bottom of the Merced River.

The gravel in the trench would be held in place by a wire grid anchored to the rock in the bottom of the stream. The pumping



plant would contain two vertically-mounted, wet-put type pumps. The static head would be 2,100 feet and the head loss would be 136 feet, resulting in a total dynamic head of 2,236 feet. This pump would have 18 stages. The rated power of the combined pump stages would be 1,100 horsepower and the rated power for each motor would be 1,155 horsepower. The energy consumption would be 2,975 kwh/AF.

The pipeline would be a 12 inch diameter steel pipe. The pipeline route would begin at the Saxon Creek pumphouse and end near Stockton Creek Dam, where the pipeline would connect to the existing 10 inch diameter supply line to the existing water treatment facility. The pipeline route has a total length of about 38,000 feet with a maximum normal working head of 2,236 feet (with one pump running at 3.5 cfs) or 2,605 feet (with both pumps running at 7.0 cfs).

The pipeline would be provided with a steel 1,000,000 gallon raw water storage tank near the high point of the pipeline to balance the pump discharge against the water demand, allowing for smoother operation of the pumps and motors. This tank would provide needed storage capacity of the Town Planning Area. Location and dimensions of storage tank will be determined in the final engineering.

The proposed project would include a new water treatment facility. The flow rate through the treatment plant would be equal to the maximum daily demand served by the plant. The State Department of Health requires "complete treatment," including flocculation, sedimentation, chlorination and filtration. The quality of Merced River water is very good and it may be possible to waive the "complete treatment" requirement and use direct filtration. An additional study would be required to make this determination. The existing treatment plant is currently running at a maximum rate of 70% of its capacity. The proposed new treatment facility makes it possible for treated water to be diverted to serve other areas. For purposes of this summary, complete treatment has been assumed.

Fire hydrants would be located along the pipeline route past points of convenient road access. These hydrants would not be supplied from storage in excess of the 1,000,000 gallon equalizing storage and would rely on the pumps being operational. The fire protection equipment would provide fire protection for this rural area.

The construction cost for 1991 would be \$8,636,000.00 and the project could be expanded to serve demands from Midpines to Bootjack.



## Appendix B

### SUMMMARY MANAGEMENT OF THE LIMESTONE SALAMANDER AREA OF CRITICAL ENVIRONMENTAL CONCERN

The Limestone Salamander ACEC was established in 1986 to protect the limestone salamander, a State-listed threatened species and a Federal Category 2 candidate for listing under the Endangered Species Act. The ACEC encompasses 1,600 acres of confirmed and potential limestone salamander habitat and adjacent BLM lands along the Merced River and its tributaries.

The limestone salamander is one of California's rarest native amphibians. The species' known range is restricted to 15 population sites (nine of which are on BLM lands) along a 20-mile stretch of the Merced River, between the headwaters of Lake McClure, near Bagby, and the mouth of Sweetwater Creek, near Briceburg. There are no reliable population estimates for the species, but it may be more numerous within its range than presently suspected. Entirely terrestrial, the species is found only on north- and northeast-facing rocky outcrops and talus slopes. It is dependent on moist conditions and good cover; thus, is vulnerable to surface disturbances within occupied sites.

Management objectives for the ACEC, as outlined in an ACEC management plan developed in 1989, include 1) prevention of surface disturbances within confirmed or potential limestone salamander habitats; 2) maintenance of cover; 3) identification of additional population sites and consolidation of BLM holdings within the species' range; and 4) promotion of public use values which are compatible with the limestone salamander's habitat needs.

Nine planned actions are being implemented to meet the above objectives. Most of these are designed to meet basic habitat needs. Their implementation will result in clarification of fire suppression concerns, improved coordination between fire protection agencies, development of a habitat monitoring program, consolidation of BLM lands and limestone salamander habitats within the ACEC, and an inventory of all suspected but unconfirmed population sites. Other planned actions are designed to guide BLM administration of the geology, forestry, range, recreation, and land tenure programs within the ACEC. These actions will ensure that general wildland management values will be emphasized in the administration of these programs. In a final planned action a 10-year review of management efforts is recommended. During this review, the effects of past management actions and future management needs would be assessed.





## Appendix C

### SUMMARY MERCED RIVER ALLOTMENT MANAGEMENT PLAN

The Bureau's Merced River Allotment Management Plan(AMP) area consists of approximately 22,880 acres of public land bounded to the south and east by the Merced Wild and Scenic River. The area provides important habitat for a variety of upland game species and winter range for the migratory Yosemite deer herd. The area provides forage for livestock under a single authorized grazing lease. The Bureau leases 2057 AUMs of use to George Meyer, a Mariposa County cattle rancher. Meyer has a cow/calf operation which utilizes both Bureau and Forest Service land. The grazing season of use authorized on BLM lands extends from March 15 to September 15. The highest percentage of livestock use on BLM lands occurs from March 15 to June 15.

This AMP was signed into affect in 1970. The major objectives of the plan are to improve livestock forage through rotation grazing, brush removal and reseeding to exotic perennial grass species. The plan is almost twenty years old and is in need of major revision. Since the development of the AMP the following has occurred in the AMP area.

1. The Bureau has de-emphasized type conversion from brush to perennial grass.
2. The Bureau has developed the Halls Gulch Habitat Management Plan (HMP) for the improvement of deer habitat. This HMP is located within the bounds of the Merced River AMP boundary.
3. A five year burn plan has been developed to reduce brush densities in the AMP and HMP areas. This burn places emphasis on natural vegetation succession following burning.
4. The Merced Wild and Scenic River corridor was established. This corridor provides the south and east boundary of the Merced River AMP area. Cattle have made historical use of the corridor, and will have occasion to drift through the area in the future.

The AMP revision will need to address each of the above and coordinate all of uses and planned improvements within the AMP area.



## Appendix D

### Merced River

#### Mineral Withdrawal Justification and Rationale

##### I. Introduction

In November 1987, by an amendment to the Wild and Scenic Rivers Act of 1975, Congress added 71 miles of the Merced River to the nation's system of wild and scenic rivers. Included were 4 miles administered by the U.S. Bureau of Land Management extending from the western boundary of the Sierra National Forest downstream to the community of Briceburg. An additional 8 miles of the Merced River, also administered by the Bureau, extending from Briceburg downstream to the point of maximum flood control storage of Lake McClure (elevation 867 feet above sea level), were placed under study for possible inclusion in the Wild and Scenic Rivers System.

In July 1988, to further protect the unique resources of the Merced River, the 1/2-mile-wide corridor designated or under study under the Wild and Scenic Rivers Act was also designated as an Area of Critical Environmental Concern (ACEC) by the Bureau of Land Management. This is one of two such designations by the Bureau on the Merced River. The Limestone Salamander ACEC was designated in 1986 to protect the habitat of a State-listed threatened species which occurs only in the Merced River basin.

A withdrawal of public lands on the Merced River from settlement, location, entry, and appropriation under the public land laws, including the mining laws, pursuant to Section 204 of the Federal Land Policy and Management Act of 1976 (P.L. 94-579; 43 U.S.C. 1714), is now proposed to meet protection needs not currently provided under the above designations. The withdrawal is needed to prevent future land tenure decisions and actions under the mining laws which could directly or indirectly affect the Merced's existing character.

##### II. Background

The Merced Wild and Scenic River is in the central Sierra Nevada, Mariposa County, California. The Merced River has been under study for inclusion in the National Wild and Scenic Rivers System since 1986. At that time a mineral withdrawal was instituted for all reaches of the Merced being considered for wild and scenic river status, as mandated under the Act. However, the Act mandates a withdrawal only for rivers under study and for river segments subsequently designated and classified as "wild." The Bureau-administered segment of the Merced River designated in 1987 has



been classified as "recreational;" thus, it is no longer protected under a mineral withdrawal.

The Bureau has recommended a "recreational" classification for the segment under study between Briceburg and the Mountain King Mine (5 miles downstream of Briceburg), and a "wild" classification for the remaining 3 mile segment between the Mountain King Mine and Lake McClure. Once approved and classified as "recreational," the segment between Briceburg and the Mountain King Mine would no longer be protected under a mineral withdrawal; thus, the segment is included in this withdrawal proposal. Because river segments classified as "wild" are automatically withdrawn from mineral entry, the segment between the Mountain King Mine and Lake McClure is not included in the proposal. For the purposes of the proposal, it is assumed that the segments of the Merced currently under study for wild and scenic river status will be approved by Congress.

Most portions of the Merced River lying on Bureau-administered lands are presently encompassed by placer mining claims. Areas under claim include Bureau-administered campgrounds, whitewater boating access points, day-use areas, and most other public use areas. Most claims are supporting small-scale operations producing only small quantities of gold. In addition, some claimants are living on their claims in substandard structures. As a result, the legitimacy of many claims is in question and some claimants appear to be in trespass of public lands.

Recent reviews of the plans of operations of mining claimants indicate that much of that mining activity presently occurring is non-commercial and recreational in nature. At present, placer mining on the Merced consists primarily of suction dredging with vacuum nozzles having intake diameters of up to 8 inches and sluices on small flotation platforms. Most placer mining claimants do not suction dredge on their claims more than a few weeks out of the year.

Given that most of the Merced River is under claim for placer gold, the public at large has been excluded from the recreational mining activities currently enjoyed by mining claimants. In addition, some placer claims have been purchased by recreational mining clubs for the exclusive use of their members. Such purchases are increasing in upstream areas of the Merced River administered by the U.S. Forest Service, and can be expected to increase in downstream Bureau-administered areas. Under current mining laws this situation is not expected to change.

### **III. Purpose and General Provisions of the Withdrawal**

The purpose of the withdrawal is a phased reduction of placer mining claims on the Merced River as they are presently instituted under the mining laws, and the replacement of the claims system with a recreational placer mining permit system. Under the





withdrawal, recreational mining permits would become available as existing claims lapse or are declared invalid. Such a permit system would allow recreational suction dredging and other forms of recreational mining to continue on the Merced, yet allow the Bureau broader discretionary control over mining activities and their impacts. Such control would ensure the preservation of the natural, "wild and scenic" character of the river yet allow a wide range of recreational activities by the public at large.

Under the proposed withdrawal, no new mining claims and no disposal of public lands under the land laws within the withdrawn area would be permitted. However, the withdrawal would not affect the patenting of lands under existing valid claims. Because mineral leasing is a discretionary action on the part of the Bureau, it too would be unaffected by the withdrawal.

As proposed, the withdrawal would include all Federal lands constituting the bed and banks of the Merced River between the highwater line on the south side of the river and the northern margin of the Yosemite Valley Railroad Grade on the north side of the river. The withdrawal would encompass lands from the USFS-BLM boundary downstream nine miles to the Mountain King Mine. The withdrawal would involve approximately 465 acres of public lands. The U.S. Forest Service is also seeking a withdrawal for the designated wild and scenic sections of the Merced River under its administration.

#### **IV. Affected Resources**

The Merced River corridor contains important natural, historical, cultural, recreational, and scenic values which led to its designation as a wild and scenic river and to other protective designations. These values are discussed below:

##### **A. Physical Description**

The Merced River originates in the high country of Yosemite National Park, near the south flank of Mt. Lyell (13,090 ft.). From its source the Merced flows west in a series of rapids and waterfalls through rugged, glacially-carved mountains and foothill country into the San Joaquin Valley. The river terminates in the San Joaquin River at Hills Ferry. A single large impoundment, Lake McClure (7,127 surface acres), interrupts the Merced's flow in the northwestern corner of Mariposa County. With the exception of a low diversion weir near El Portal, at the entrance to Yosemite, the river is free flowing between its source and Lake McClure.

The Merced River carves a spectacular steep-sided gorge as it passes through Bureau-administered lands. The rise between the river and the crest of the gorge on the average is about 2,000 feet. Elevation above sea level ranges from 867 feet at the





headwaters of Lake McClure to 4,174 feet at Feliciana Mountain near the USFS-BLM boundary. The main ridges are heavily dissected with south and west running, deep, narrow canyons.

## B. Minerals

Bureau-administered lands on the Merced River lie within the western metamorphic belt of the Sierra Nevada physiographic province. It is a belt of steeply dipping metasedimentary and metavolcanic rocks of Paleozoic and Mesozoic ages lying between the granitic Sierra Nevada batholith to the east and overlapping sediments of the Great Valley province to the west. The primary commercially valuable mineral occurring within the province is gold. Both lode and placer gold are present; however, the proposed withdrawal would affect only the mining of placer gold.

Placer gold deposits occur in stream alluvium and in terraces of older gravels situated above the Merced River's present drainages. Although placer mining in this region began in the 1850s, only a few mines were developed in the area prior to the 1960s. During the 1970s and 1980s, placer mining activity along the Merced River and its tributaries intensified, due partially to advancements in placer mining technology (e.g. suction dredging), and to the deregulation of gold prices in 1974.

Estimates of past and present placer gold production are not available for the proposed withdrawal area, though at present nearly all of the lands within the area are under placer mining claims. As mentioned previously, most of the mining activity presently occurring is non-commercial and essentially recreational in nature, and only small quantities of gold are being produced.

## C. Fisheries and Wildlife

Fisheries. Within the proposed withdrawal area the Merced River occupies a transitional zone between the cold waters of the upper reaches of the Merced and the warm waters of Lake McClure. In general, the fisheries of these areas tend toward the warmwater type; however, a broad cross section of native and introduced, warmwater and coldwater fish species occur. Smallmouth bass (Micropterus dolomieu) predominate in a year-round warmwater sport fishery, while rainbow trout (Salmo gairdnerii) and brown trout (Salmo trutta) are present in the winter months and during spring runoff. Occasionally, coho salmon (Oncorhynchus kisutch) migrate from Lake McClure into the Merced system, but are not self-sustaining outside Lake McClure.

Wildlife. The most unique and probably the rarest species which occurs in the Merced River basin is the limestone salamander (Hydromantes brunus), currently listed as threatened under California's Endangered Species Act. The species' known range is



restricted to 15 population sites along a 20-mile stretch of the Merced between the mouth of Sweetwater Creek, near Briceburg, and the headwaters of Lake McClure. It occurs nowhere else in the world. Nine of the 15 confirmed population sites occur on BLM lands. Eight of 9 sites occurring on BLM lands occur within the designated wild and scenic river corridor. Entirely terrestrial, the limestone salamander is found only on north- and east-facing rocky outcrops and talus slopes. It is dependent on moist conditions and good cover; thus, is vulnerable to surface disturbances.

Over 200 species of birds occur seasonally or as residents in the Sierra Nevada. Many of these species can be found on the Merced River. A number of important game species occur here including the California quail (Lophortyx californicus), mountain quail (Oreortyx pictus), American turkey (Meleagris gallopavo), band-tailed pigeon (Columbia fasciata), mourning dove (Zenaida macroura), and common snipe (Capella gallinago). Also of interest is the roadrunner (Geococcyx californianus), an uncommon (nongame) resident, and the wood duck (Aix sponsa), a common breeder. The mallard (Anas platyrhynchos), bufflehead (Bucephala albeola), cinnamon teal (Anas cyanoptera), and common merganser (Mergus merganser) also breed on the Merced. A variety of other waterfowl species and shorebirds occur as winter migrants.

The Merced River supports a number of raptor species which currently appear on Federal and State endangered species lists. The Federal- and State-listed bald eagle (Haliaeetus leucocephalus) occurs as a winter migrant on all reaches of the Merced, but concentrates in numbers on Lake McClure. A single breeding record from 1925 is known for the North Fork of the Merced. Given a breeding range extension which is currently underway in California, it is likely that the species will breed once again on the Merced. The great gray owl (Strix nebulosa), a State-listed endangered species, moves downslope into the Merced during the winter from its breeding areas in Yosemite National Park. The spotted owl (S. occidentalis) also reportedly winters and may breed in the area. Sierra populations of the spotted owl are not currently listed as threatened or endangered; however, they are being watched very closely by Federal and State officials to prevent the declines which have occurred in northern populations. Finally, the Federal- and State-listed peregrine falcon (Falco peregrinus) occurs on the Merced River as a casual winter migrant.

At least 94 species of game and nongame mammals occur in the Sierra Nevada. Nongame species in the Merced River area include the opossum (Didelphis virginiana), porcupine (Erethizon dorsatum), and northern flying squirrel (Glaucomys sabrinus). Common small game species include the brush rabbit (Sylvilagus bachmani), desert cottontail (S. audubonii), black-tailed jackrabbit (Lepus californicus), western gray squirrel (Sciurus griseus), and Douglas' squirrel (Tamiasciurus douglasii). Common big game





species in the area include the black bear (Ursus americana) and mule deer (Odocoileus hemionus) (the Merced River basin provides critical winter range for the Yosemite deer herd). Furbearers which are known to or probably occur include the muskrat (Ondatra zibethicus), coyote (Canis latrans), gray fox (Urocyon cinereoargenteus), the protected ringtail (Bassariscus astutus), racoon (Procyon lotor), long-tailed weasel (Mustela frenata), mink (M. vison), badger (Taxidea taxus), western spotted skunk (Spilogali gracilis), striped skunk (Mephitis mephitis), and bobcat (Felis rufus). The status of the marten (Martes americana), river otter (Lutra canadensis), beaver (Castor canadensis), and mountain lion (Felis concolor) is uncertain, but these species probably occur in small numbers.

#### D. Rare Plants

Four listed plant species are known to occur within the Merced River corridor between El Portal and Briceburg. They include: the Yosemite onion (Allium yosemitense), a State-listed rare species; Merced clarkia (Clarkia lingulata), a State-listed endangered and Federal Candidate 1 species; Congdon's woolly sunflower (Eriophyllum congdonii), a State-listed rare species; and Congdon's lewisia (Lewisa congdonii), also a State-listed rare species. A fifth species, shaggyhair lupine (Lupinus spectabilis), is known to occur in the western portions of the wild and scenic river corridor, near Lake McClure. This is a Federal Candidate 2 species.

#### E. Cultural Resources

As a result of two cultural inventories conducted during the 1970s, cultural resources within the Merced River canyon are fairly well known. The Merced River Canyon contains a number of significant historical and archeological sites. Recorded sites include fifteen different groups of Indian grinding rocks, and one Indian habitation site at Good Gulch (midden and bedrock mortars) overlain with historic features (building foundations, graves, etc.). Also recorded are the remains of nine historic cabins and other features related to nineteenth century lode gold mining.

The two studies do not comprise a complete inventory of all cultural resources in the study corridor; however, they serve to define very well the types of resources present. The grinding rocks are generally considered to have only moderate value as archeological resources, and once fully recorded, their scientific potential is minimal. However, the Indian habitation site appears to contain important scientific information, and it should be fully protected from further disturbance until its significance can be evaluated through excavation. The historical significance of the cabins and other ruins will have to be investigated through documentary research and interviews. The research has not yet been conducted, and none of the historic sites should be disturbed until they are fully evaluated.





Also situated on public lands in the Merced River canyon are two historic properties whose significance is well documented. One is the Yosemite Valley Railroad, which operated between 1907-1945 and provided the only reliable transportation to Yosemite National Park until the mid-1920's. The line ran from Merced to El Portal, carrying passengers and freight through the canyon. Although lacking in continuity due to the collapse of many trestles, the abandoned railroad grade still serves as the only overland access into most of the canyon's public lands.

The second historic property is a parcel in Briceburg containing the Briceburg Inn, an architecturally significant building constructed in 1927. For several years prior to the Inn's construction, this parcel was also the site of Camp E, a convict labor camp which housed the prisoners who constructed the Yosemite All-Year Highway (now State Route 140).

#### F. Recreation

The Merced River provides recreational opportunities to public users from Los Angeles, the Bay Area, the Central Valley, and local communities. Recreation and tourism has become the single most important industry in Mariposa county, generating over 40 percent of its net income. Two areas in Mariposa County, Yosemite National Park and the Merced River basin, receive most of that use. Over 100,000 visitors make the Merced River their primary destination for recreation each year. As a result, the Bureau of Land Management is planning approximately \$400,000 of improvements in recreation and public use facilities in the wild and scenic river corridor and proposed withdrawal area.

Recreational opportunities on the Merced River are enhanced by the free-flowing nature of the river, the quality and variety of its rapids, its interesting history, the presence of archeological sites, abundant wildlife, undisturbed plant communities, unmatched scenery, availability of placer gold, and ease of access. Recreation is currently the most important form of public use occurring on the Merced River. Primary recreation activities include whitewater boating, camping, fishing, hiking, swimming, and recreational mining for gold.

Whitewater recreation accounts for the greatest recreational use on the Merced River, accounting for 10,000-15,000 user days per year and \$1.5 - \$2 million in revenues. Commercial whitewater outfitters account for 6,000-7,000 user days. Nine commercial outfitters are currently operating on the Merced under Bureau permits. The primary use period for whitewater recreation occurs between April and July.

Camping occurs at 3 unimproved campgrounds, McCabe Flat, Willow Placer, and Railroad Flat, located on the north side of the river



near Briceburg. These campgrounds provide a total of 23 drive-in campsites. The Bureau plans to develop an additional 20 walk-in campsites downstream of the established drive-in sites, in the more remote stretches of the Merced. These would be maintained as primitive campgrounds.

The Bureau is also considering the development of a mountain bike-equestrian-hiking trail in the Merced River drainage. This would be a cooperative effort between the U.S. Forest Service, National Park Service, and the Bureau. As proposed, the trail would run between Lake McClure, near the western boundary of the Wild and Scenic River corridor, to Yosemite National Park, following the historic old Yosemite Railroad grade.

## **V. Effects of the Withdrawal**

### **A. General Effects**

The proposed withdrawal will improve the Bureau's ability to protect the nationally unique resources of the Merced River and public investments there. Currently, the Bureau has limited discretionary control of placer mining on the Merced River. Under current mining law and administration, the patenting of claims on the Merced and subsequent loss of public ownership, use rights, and facilities remains a real possibility. The withdrawal will guarantee the right of the public at large to recreational opportunities--including recreational mining--in perpetuity.

The administration of placer mining on the Merced River under a recreational mining permit system will have a variety of additional benefits. First, the number of recreational dredgers and panners could be increased. At present, the number of miners operating on the Merced is limited to claimants and their affiliates. Second, a recreational mining permit system would allow greater regulation of mining activity through regulated seasons of use and length of stay; thus, the negative impacts of mining on other recreational activities would be reduced. Finally, the Bureau's discretionary control of resource impacts due to mining would be increased and public use conflicts would be reduced.

### **B. Effects on Mining**

A mineral withdrawal and the initiation of a recreational placer mining permit system will not have a significant negative effect on mining. In fact, the long-term effects of the withdrawal on mining are expected to be largely beneficial. Most placer mining presently occurring on Bureau-administered lands on the Merced River is non-commercial and only small amounts of gold are being produced. The permit system will allow an overall increase in the number of recreational miners operating on the Merced. The



withdrawal will end the domination of mining on the Merced River by a relatively few number of claimants who mine only occasionally.

### C. Economic Effects

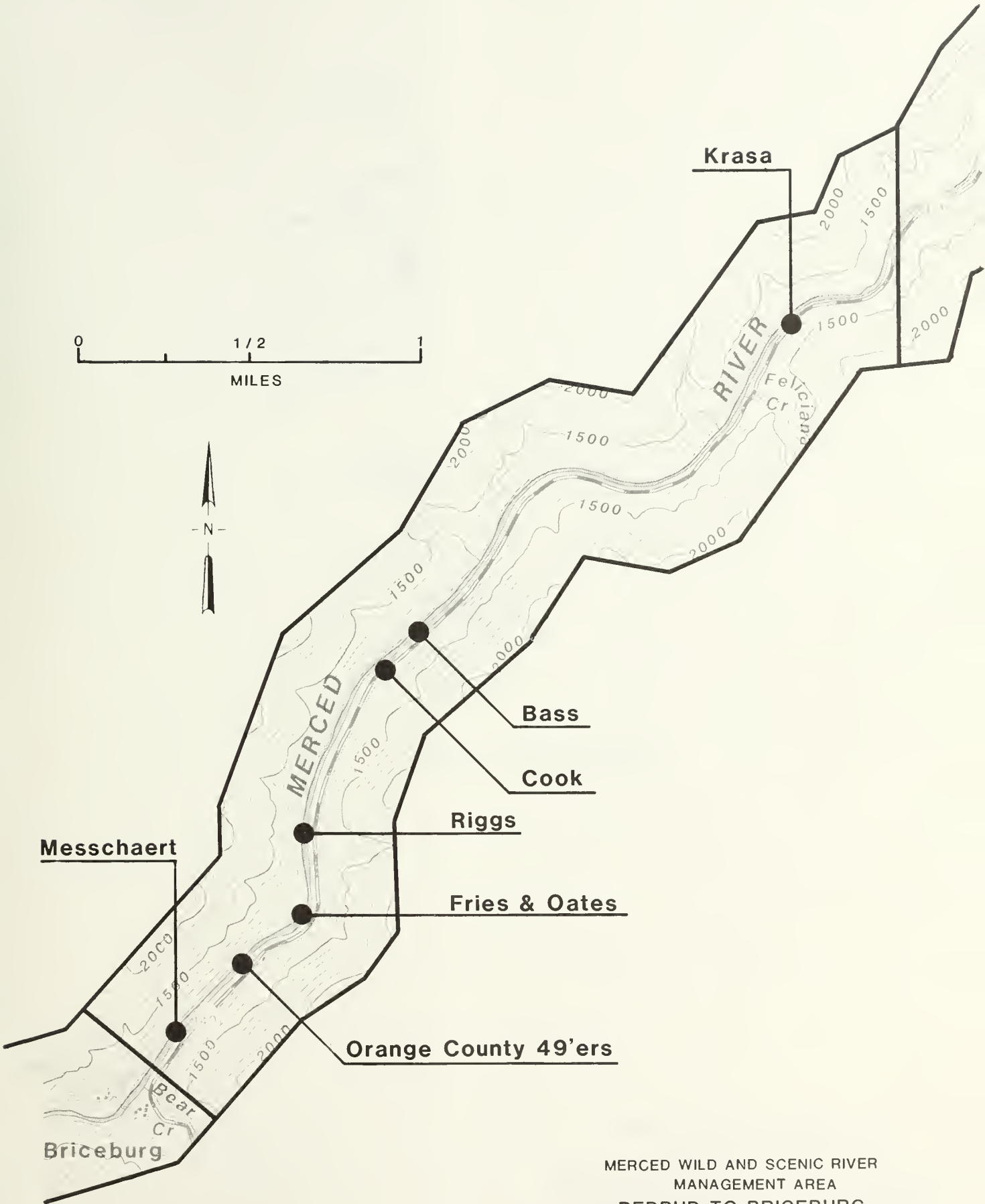
Placer mining on the Merced River has remained essentially non-commercial for over 100 years and has at no time contributed significant revenues to local or regional economies. On the other hand, recreation is presently contributing over 40 percent of Mariposa County's revenues. Under the proposed withdrawal, recreational mining is expected to increase. Thus, the economic effects of the withdrawal, while minor, will tend to be positive.



Appendix E  
Existing Placer Mining Operations  
Maps



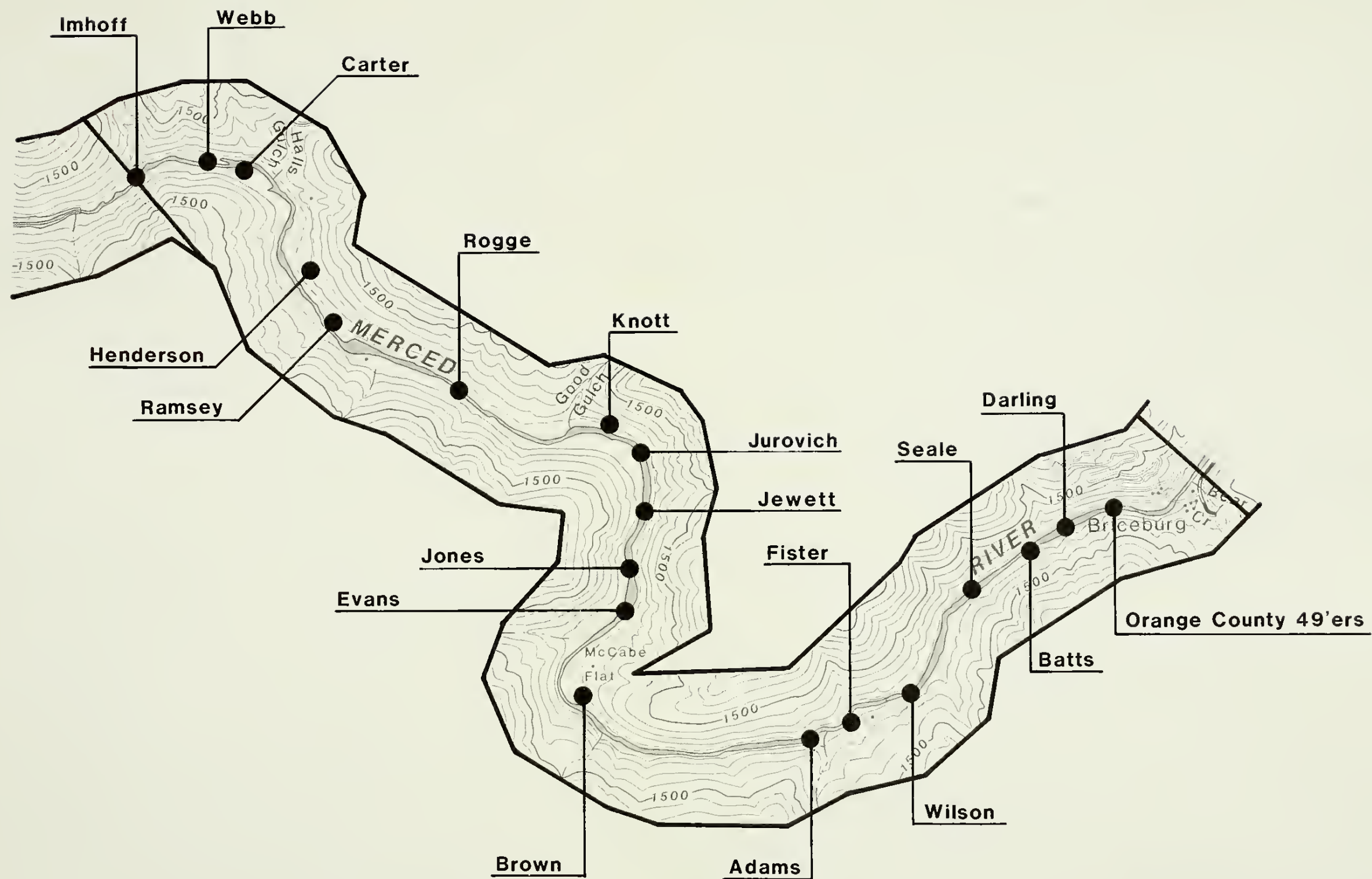




MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
REDBUD TO BRICEBURG  
**PLACER MINING CLAIMANTS  
AND  
OPERATORS**

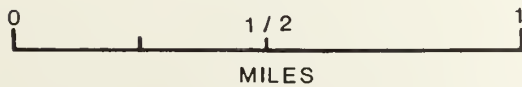
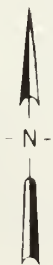
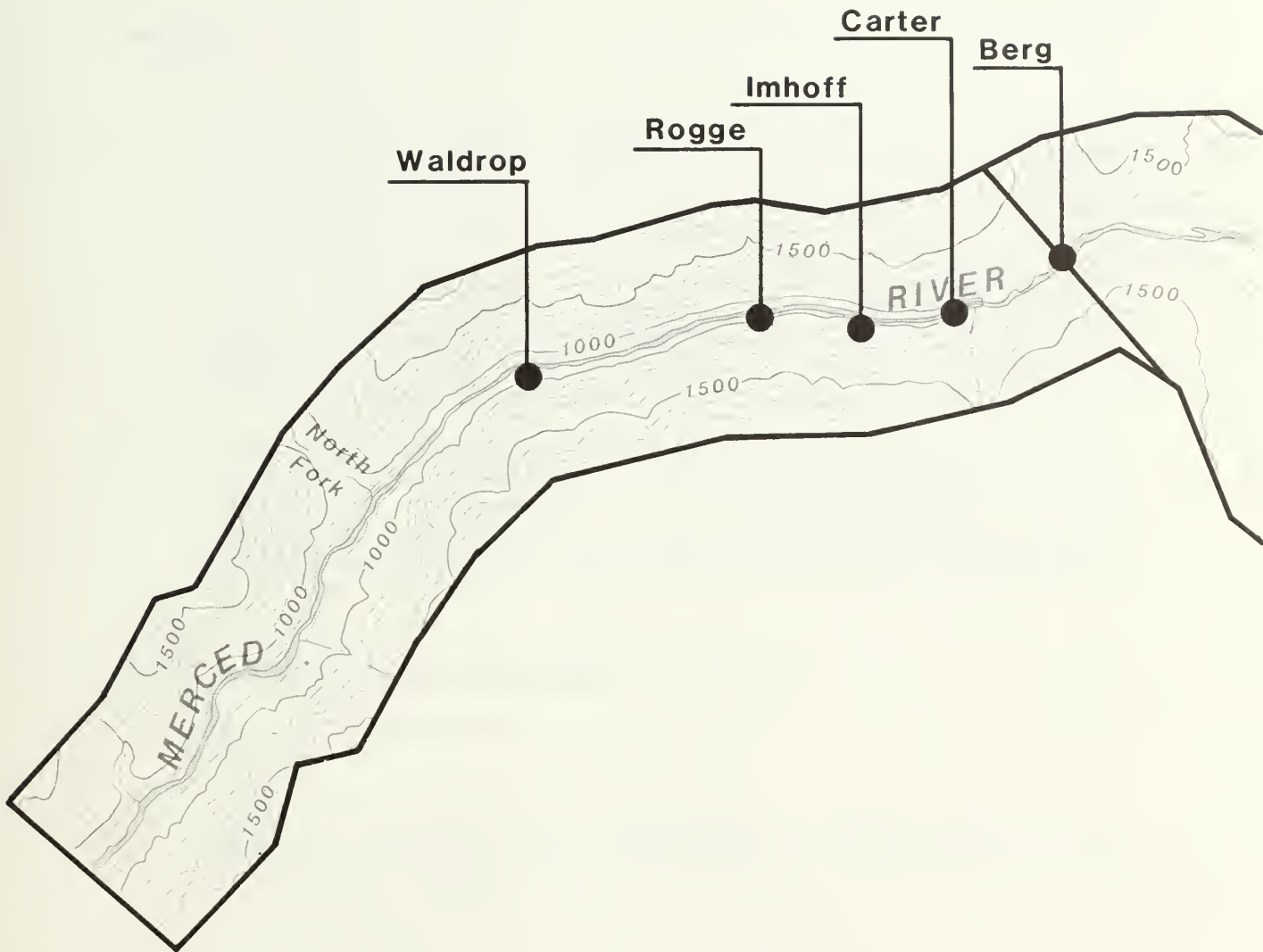
**APPENDIX-E**





MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
BRICEBURG TO MOUNTAIN KING MINE  
PLACER MINING CLAIMANTS  
AND  
OPERATORS  
APPENDIX-E





MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
MOUNTAIN KING MINE  
TO  
LAKE McCLURE 867' LEVEL  
**PLACER MINING CLAIMANTS  
AND  
OPERATORS**

**APPENDIX-E**





## Appendix F

### Guidelines for Placer Gold Mining of the Merced River Streambed

#### A. General

1. Placer gold mining operations will be subject to all applicable county, state and federal laws and regulations. In addition, plans of mining claim operations (43 CFR 3809) will not be approved unless the claims have cleared Public Law 359.
2. Mining equipment may include gold pans, rockers, sluices, water pumps, suction dredges, etc. No explosives or mechanized earth-moving equipment (other than suction dredges) will be used. The use of suction dredges with intake diameters exceeding eight inches is not allowed.
3. A bond may be required to cover the cost of campsite cleanup and/or reclamation. The bonding amounts will be determined according to the characteristics of each operation. Bonds will be released upon certification that cleanup and/or reclamation efforts are successfully completed.

#### B. Suction Dredging and Motorized Sluicing

1. The dredging season begins on July 15 and ends on October 31.
2. Within the recreational segments of the river (BLM, #1 and #2), certain areas are closed to motorized sluicing and suction dredging. See Appendix \_\_\_\_ for map locations of open and closed areas.
3. A one dredge operation will be given a 300 foot buffer upstream and downstream. Two or more dredges operating side-by-side will be given buffer zones of 500 feet upstream and downstream.
4. At any given location on the river, suction dredging operations will be confined to only half of the river (from one bank to the river's center). In order to minimize interference with other uses of the river, the remaining half will be kept free of suction dredging equipment.



5. All cables must be at least 10 feet above the water level. Brightly colored strips of cloth or rope will be tied to the cable to improve visibility thereby reducing possible hazards.

**C. Health, Safety and Sanitation**

1. Campsite occupants will provide an adequate supply of water for drinking and cooking. Drinking river water is a health hazard.
2. All garbage and litter must be removed from the river corridor and disposed of according to current health standards. Chemical toilets or camper trailer holding tanks will be used for the disposal of solid human wastes and will be emptied only at approved disposal stations.

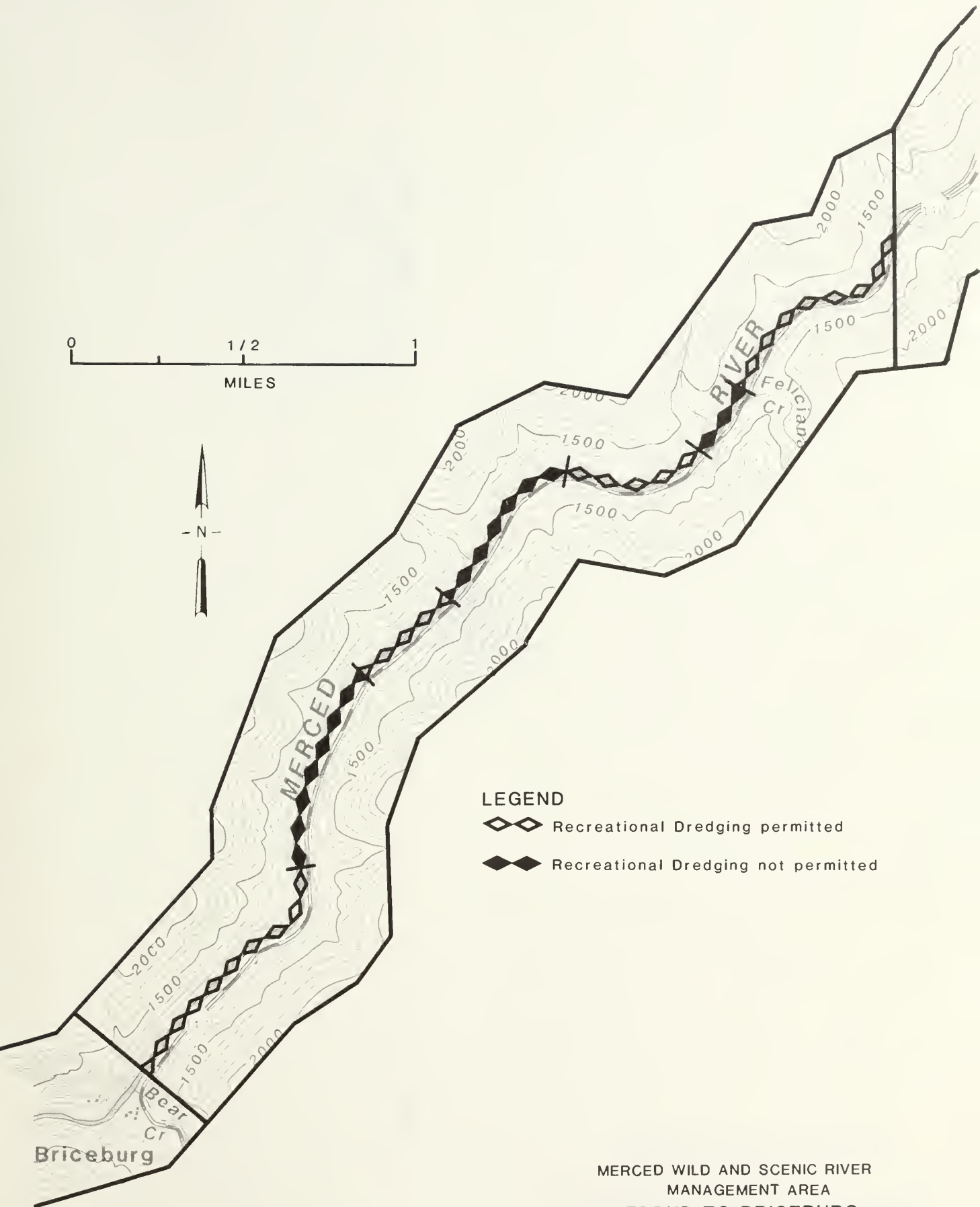
**F. Other**

Mining claim operations will be subject to all applicable county, state and federal laws and regulations (43 CFR 3809.3-1(a)). In addition, no mining plans of operation shall be approved unless the claims have cleared Public Law 359.



Appendix G  
Allowable Dredge Location Map

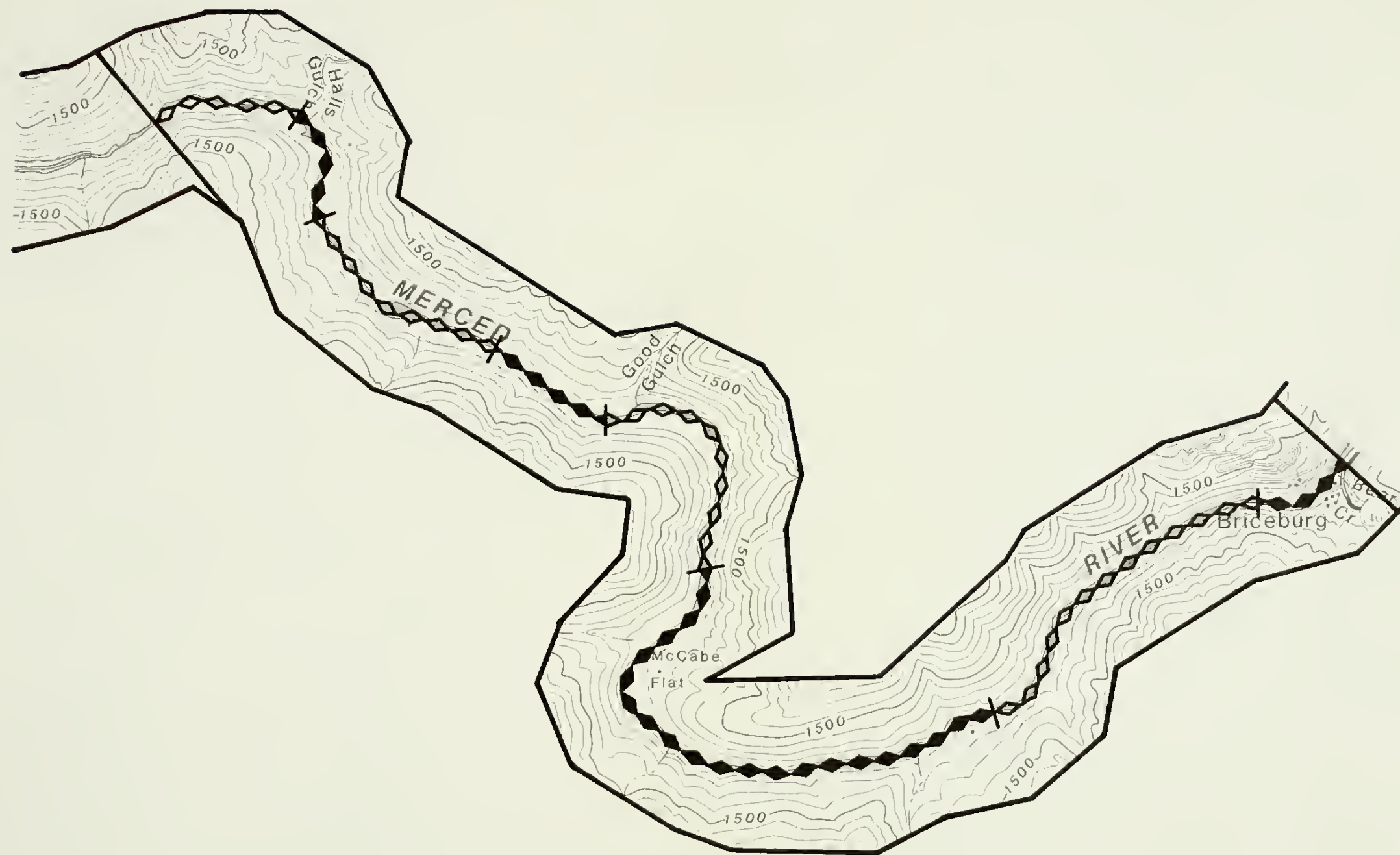






MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
REDBUD TO BRICEBURG  
**RECREATIONAL DREDGING**

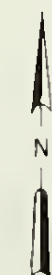
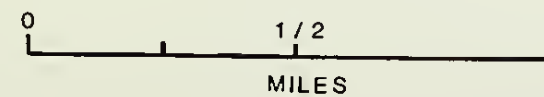






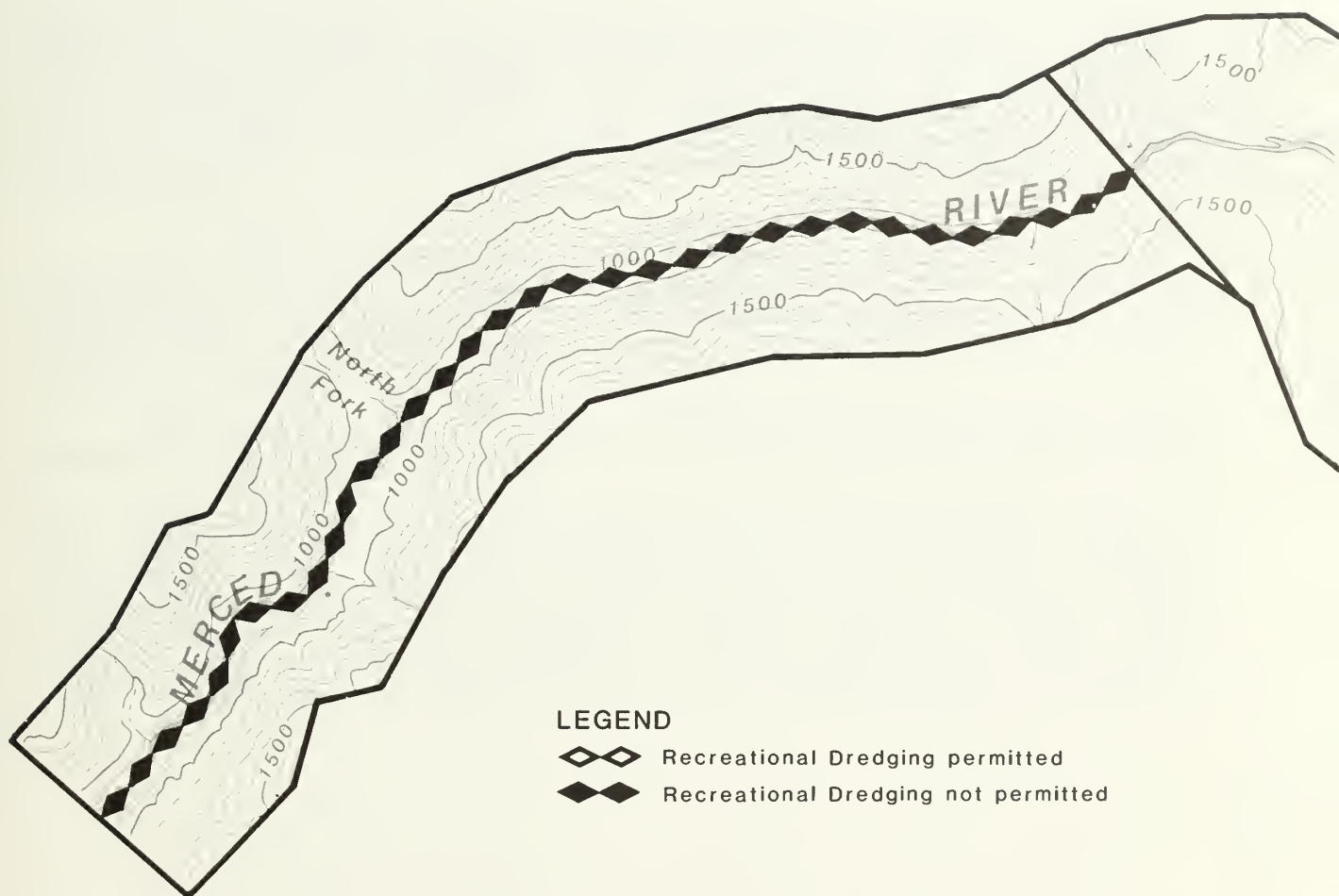
**LEGEND**

-  Recreational Dredging permitted
-  Recreational Dredging not permitted





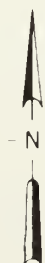
MERCER WILD AND SCENIC RIVER  
MANAGEMENT AREA  
BRICEBURG TO MOUNTAIN KING MINE  
**RECREATIONAL DREDGING**





**LEGEND**

-  Recreational Dredging permitted
-  Recreational Dredging not permitted



MERCED WILD AND SCENIC RIVER  
MANAGEMENT AREA  
MOUNTAIN KING MINE  
TO  
LAKE McCLURE 867' LEVEL  
**RECREATIONAL DREDGING**



## Appendix H

### SUMMARY MERCED RIVER BURN PLAN

The Bureau's Merced River Burn Plan is a five year prescribed burn plan for a 30,000 acre area of public land which is located along the BLM's entire 14 mile portion of the Merced Wild and Scenic River corridor.

There are five burn blocks identified under this plan. Three of the five burn blocks include the Wild and Scenic River corridor. Two of these blocks encompass the entire north side of BLM's 14 mile stretch of river from the BLM/Forest Service boundary to the 867-foot level. The other block is found on the south side of the river and begins at Briceburg and extends 1/2 mile beyond the 867-foot level.

The definition of prescribed burning is to use fire under a predetermined set of conditions to accomplish specific management objectives. The objectives for this management plan are watershed enhancement, hazard and fuel reduction, improved livestock forage condition and improved wildlife habitat.

Two blocks of the five in the project have been burned under prescription in 1982 and 1986.

Wildfires on the adjacent Stanislaus National Forest lands in 1987 have significantly reduced available deer winter habitat temporarily. The Bureau has therefore proposed to delay further implementation of the project until wildfire areas have rehabilitated. Future prescribed burning projects would begin based on consultation with the California Department of Fish and Game and with the livestock operations in the burn project area.





Appendix I

General Guidelines and  
Published Supplemental Regulations

A. Camping

1. Limited to 14 days during any ninety day period. No more than 4 adults allowed per campsite. No overnight parking will be allowed between Briceburg and McCabe Flat on the roadbed or associated pull-out areas of the Merced River access road.
2. Tarps used at campsites must be earth-toned color, i.e., green or brown.

B. Campfire Permit

1. Prior to building any fire, campsite occupants must obtain a California Campfire Permit and abide by the conditions of the permit. The fire permit must be presented, upon request. Only dead and down wood may be utilized for campfires. There shall be no more than one (1) campfire allowed per campsite.
2. Campfires must be located at least 10 feet or more distance from live or dead vegetation.



[CA-010-08-4333-02]

**Supplementary Rules for The Merced River Area; California**

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Establishment of supplemental rules for the management of public lands along the Merced River of the Folsom Resource Area, Bakersfield District, California.

**SUMMARY:** On public lands along the Merced River the following special regulations apply:

1. Parking upon any portion of the traffic lanes of the Merced River access road is prohibited.
2. Overnight parking between Briceburg, California and McCabe Flat campground upon the road bed and associated pull out areas of the Merced River access road is prohibited.
3. Overnight camping upon the road bed, associated pullout areas, and on the upslope side of the Merced River access road is prohibited.
4. Motor vehicles not licensed for highway use are prohibited unless authorized by special permit.

**DATE:** These supplemental rules to take effect on May 1, 1988.

**FOR FURTHER INFORMATION CONTACT:** Deane K. Swickard, Folsom Resource Area Manager, Folsom Resource Area Office, 63 Natoma Street, Folsom, California 95630. Telephone: (916) 985-4474.

**SUPPLEMENTARY INFORMATION:** The purpose of these supplemental rules is to eliminate camping and illegal parking and to control the usage of all terrain vehicles (ATV) on the Merced River access road below, or downstream, from

Briceburg, California on public lands. The rules are designed to control and reduce congestion along the road in order to protect persons and property and to provide for maximum usage by the visiting public without jeopardizing the natural values to be protected.

Authority for these supplemental rules is contained in Title 43 of the CFR, Chapter II, Part 8365, Subpart 8365.1-6.

Any person who fails to comply with these supplemental rules may be subject to a fine not to exceed \$1,000 and/or imprisonment not to exceed 12 months. Penalties are contained in CFR Title 43, Chapter II, Part 8360, Subpart 8360.0-7.

Dated: January 29, 1988.

D.K. Swickard,

Area Manager.

[FR Doc. 88-2430 Filed 2-4-88; 8:45 am]

BILLING CODE 4310-40-M



**DEPARTMENT OF THE INTERIOR****Bureau of Land Management****Camping and Firearms Use  
Restriction; Merced River and Folsom  
Resource Areas, Bakersfield District,  
CA**

**AGENCY:** Bureau of Land Management,  
Interior.

**ACTION:** Establishment of Camping and  
Firearms Use Restriction Order on  
Public Lands along the Merced River of  
the Folsom Resource Area, Bakersfield  
District, CA.

**SUMMARY:** Persons without commercial  
permits may camp along the Merced  
River in designated campsites only,  
between Bryceburg and Halls Gulch.  
Each campsite will have a maximum  
occupancy of 4 adults (16 years and  
older). Each campsite may have no more  
than two motor vehicles, or combination  
of a motor vehicle and a recreational  
vehicle. Discharge of firearms is  
prohibited within 1/2 mile of the center of

the river for all public lands along the  
Merced River. For the purpose of this  
order, a firearm is defined as under Title  
18, U.S.C., Chapter 44, section 921(a)(3).  
Federal, State and local law  
enforcement officers are exempt from  
this order in the course of their official  
duties. This order goes into effect on  
March 31, 1986.

**DATE:** This order is in effect on March  
31, 1986.

**FOR FURTHER INFORMATION CONTACT:**  
Deane K. Swickard, Folsom Resource  
Area Manager, Folsom Resource Area  
Office, 83 Natoma Street, Folsom,  
California 95630. Telephone: (916) 985-  
4474.

**SUPPLEMENTARY INFORMATION:** The  
purpose of this order is to protect  
resources of the public land, persons  
and property, and augment the Camping  
and Occupancy Restriction Order  
published in the Federal Register,  
Volume 48, No. 208, October 26, 1983,  
49555. Authority for this restriction order  
is contained in CFR Title 43, Chapter II,  
Part 8364, Subparts 8364.1 and 8365.1-  
2(a).

Any person who fails to comply with  
this restriction order may be subject to a  
fine not to exceed \$1,000 and/or  
imprisonment not to exceed 12 months.  
Penalties are contained in CFR Title 43,  
Chapter II, Part 8360, Subpart 8360.0-7.  
D.K. Swickard,

*Area Manager.*

[FR Doc. 86-6054 Filed 3-19-86; 8:45 am]

BILLING CODE 4310-40-M



I

[CA-010-09-4333-11]

**Designation of the Briceburg Day Use  
Area Folsom Resource Area,  
Bakersfield District, California**

**AGENCY:** Bureau of Land Management  
Interior.

**ACTION:** Designation of certain public  
lands in Mariposa County, California,  
adjacent to the Merced River and State  
Highway 140 (known as Briceburg) as a  
Day Use Area. Hours of use are from  
sunrise to sunset.

**SUMMARY:** The location of Briceburg is  
described as a portion of the East Half  
of the Northeast Quarter (E½NE¼) of  
Section 10, Township 4 South, Range 18  
East, Mount Diablo Meridian. This 18-  
acre parcel has been acquired by the  
Bureau of Land Management to enhance  
recreation opportunities and public land  
management within the Merced Wild  
and Scenic River Study Corridor.

Briceburg is designated a Day Use  
Area only. No camping or other  
overnight activities will be allowed.

**SUPPLEMENTARY INFORMATION:** This use  
restriction is established to protect and  
enhance the historic building site,  
provide for a safe ingress and egress  
point at State Highway 140, and to  
provide for the high demand for  
recreation opportunities in the limited  
space available for public use.

Authority for this restriction order is  
contained in 43 CFR 8364.1. Any person  
who fails to comply with a restriction  
order may be subject to a fine not to  
exceed \$1,000 and/or imprisonment not  
to exceed 12 months. Penalties are  
contained in 43 CFR 8360.0-7. Only  
delegated Federal Law Enforcement  
Officers, or any California State Peace  
Officer as defined in California Penal  
Code Section 830, or officials of the  
United States Departments of Interior  
and Agriculture, while engaged in these  
official duties, shall be exempt from this  
order.

**DATES:** This order is in effect  
immediately and the order is permanent  
until cancelled, amended or replaced.

**FOR FURTHER INFORMATION CONTACT:**  
Deane K. Swickard, Area Manager,  
Bureau of Land Management, Folsom  
Resource Area, 83 Natoma Street,  
Folsom, CA 95630; (916) 985-4474.

Date: May 18, 1989.

D. K. Swickard,

Resource Area Manager.

[FR Doc. 89-12539 Filed 5-24-89; 8:45 am]

BILLING CODE 4310-40-48





The diagram illustrates the experimental setup. A subject is seated at a table, looking at a video screen. On the screen, a target (a small circle) is displayed. The subject's hand is positioned at a starting point (a larger circle). A camera is positioned above the screen to capture the hand's position. The diagram shows the visual feedback loop where the subject sees their hand's position on the screen and adjusts it to reach the target.

	OFFICE	DATE RETURNED
(Continued on reverse)		

**BLM LIBRARY  
SC-324A, BLDG. 50  
DENVER FEDERAL CENTER  
P. O. BOX 25047  
DENVER, CO 80225-0047**

DATE DUE

GAYLORD			PRINTED IN U.S.A.

